

RAILWAY AGE

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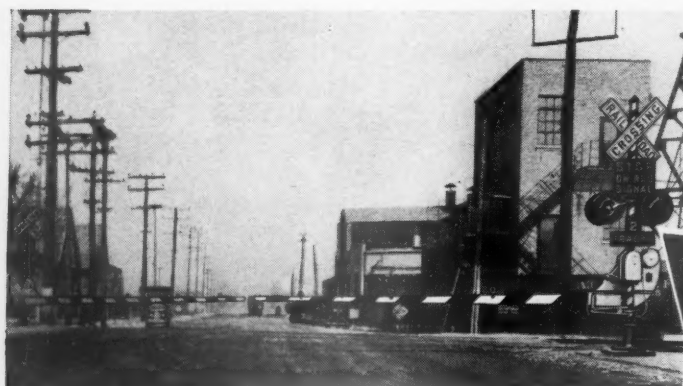
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RAILWAY AGE

With which are incorporated the Railway Review, the Railway Gazette, and the Railway-Age Gazette. Name Registered in U. S. Patent Office and Trade Marks Office in Canada.

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POINT MOVES**

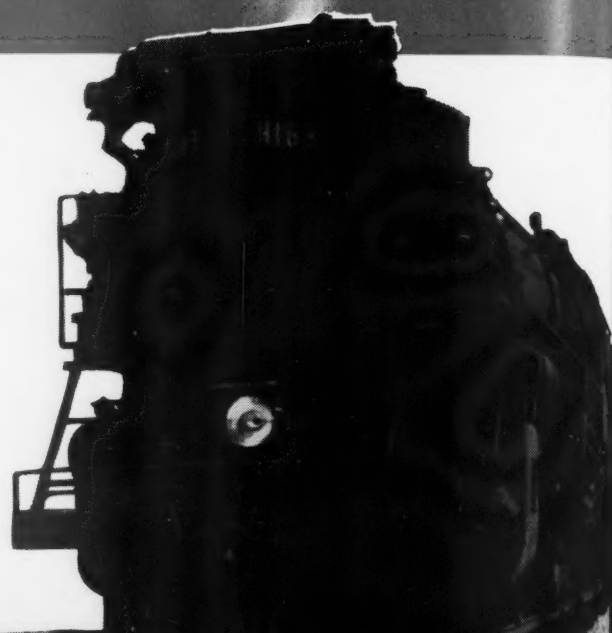
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Switch Stands

"Union" Switch Stands safeguard facing point moves by providing these extra safety features *in one mechanism*:

- (1) A standard *lock rod* which mechanically locks the switch in the normal position.
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Switch Stand**

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WEEK AT A GLANCE

NEXT WEEK: The 1949 Freight Progress issue of *Railway Age*.

SPOTLIGHT ON ATLANTIC CITY: Next week also, from May 16 to 19, inclusive, at Atlantic City, N. J., the Railway Accounting Officers will hold their 55th annual meeting, with a number of railroad presidents also expected to be on hand as guests and observers. The time- and labor-saving, cost-reducing, and efficiency-increasing potentialities of modern mechanical accounting and bookkeeping machinery—much of which will be on display during the meeting—is sure to be a major topic of discussion.

MODERN METHODS: In recognition of the accounting officers' convention, we include in this issue several articles, all illustrated, of special interest to the men who prepare the statistical tools without which no management can successfully operate any company. In one, starting on page 38, D. J. Spowart, superintendent of car service of the Western Pacific, tells how his company uses tabulating equipment to prepare mechanically per diem reports, train-hour reports and other transportation statistics. A brief article on page 41 describes methods employed by the Canadian National to reduce time, money and possibility of error in taking inventory. On pages 42-44, the Reading's method of prorating freight revenues by machine is described by J. G. Wormick, auditor of revenues. And, beginning at page 55, there are illustrated descriptions of a whole series of new machines for various office uses.

THE THREAT OF NATIONALIZATION: Nationalization of railroads is a real danger—but it can be averted by prompt and effective action, the Chamber of Commerce of the United States was told at Washington last week. Our News account of the meeting indicates that some of the speakers did some pretty plain talking—about business men, for example, who oppose “government in business” even as they pull political strings to obtain “free waterways,” built at public expense, for their own personal benefit.

NEW “COLUMBIAN”: Another fine new train—the Baltimore & Ohio's all-coach Washington-Chicago “Columbian”—goes into service tomorrow. There's a brief story about it in our News pages this week, with a more detailed description scheduled for publication in an early issue.

71 PER CENT DISCOUNT: A 71 per cent discount looks like pretty good business for the recipient. But that's exactly what an Interstate Commerce Commission examiner figures the railroads gave the government, through payment of war-time taxes on movement of some of the Reconstruction Finance Corporation's war-time freight. For that reason, and also because the rates charged were not unreasonable

anyway, he has recommended that the I.C.C. dismiss an R.F.C. demand for “reparations.” Details are given in the News section—which also reports that in the larger “reparations” cases, where billions instead of thousands of dollars are involved, the railroads have acquired two additional allies—the Brotherhood of Railroad Trainmen and the Railroad Security Owners Association.

INTERNAL AND EXTERNAL INFLUENCES: The railroads' relatively poor 1949 financial start, as measured by first quarter results, was due, our leading editorial declares, to the effect on the industry of both internal and external influences. Reasoning from that premise, the editorial goes on to point out what some of those influences were, and what factors may aid in overcoming them.

LOOKING 'EM OVER: New car inspection stations, of a highly efficient type, have been installed by the Union Pacific on the approach tracks to its classification yards at Pocatello, Idaho, and North Platte, Neb. The new facilities, which permit five-point inspection of moving cars, are described and illustrated in a feature article which begins on page 50.

NEW PRESIDENT FOR BALDWIN: M. W. Smith, formerly executive vice-president, is the new president of the Baldwin Locomotive Works. An outline of Mr. Smith's business career appears on page 49.

STILL GOOD CUSTOMERS: Considering differences in traffic volume, western storms, and other adverse factors, railroad purchasing figures for the first two months of 1949 have held up surprisingly well as compared with the same months of 1948. As shown on page 53, the over-all drop in total buying is due almost entirely to smaller equipment purchases, with orders for rail, ties and miscellaneous supplies all running ahead of a year ago. Another few months, incidentally, may show a distinct change in the equipment picture, if recent orders for 21 Diesel-electric locomotive units, as reported in the week's news, are a reliable “straw in the wind.”

CONTROLLING PASSENGER COMFORT: Few things, probably, contribute more to railroad passenger comfort than properly controlled interior car temperatures. On a long transcontinental run, such as the one from Chicago to Los Angeles, where a car may move in a few hours from mountain cold to sub-tropic desert heat, proper temperature control is a real problem. For that reason, our illustrated account (page 45) of a recent test, on that very run, of Minneapolis-Honeywell's Electronic Control System should be of equal interest to mechanical and passenger traffic officers.

NAILABLE STEEL FLOORING*

Keeps Gondolas Off the Rip Tracks— Out of the Shops

NAILABLE STEEL FLOORING helps keep gondolas off the Bad Order Report, saves you money in floor repair and replacement costs. Check these points that show *why* NAILABLE STEEL FLOORING cuts floor maintenance costs and keeps cars where they belong—on the line, bringing in revenue.

Greater Strength—Channel design gives NAILABLE STEEL FLOORING higher strength, more resistance to dishing than steel plate floors. After months of grinding impacts from magnets, hot pig iron and the clamshell shown, the NAILABLE STEEL FLOOR in a test car retained its over-all flatness and nailability, its suitability for blocked and skidded loads.

No Nail Damage—Nails can't rip or splinter NAILABLE STEEL FLOORING, can't damage it in *any* way. Held tighter than in wood, the proper size nails (20d or 30d in gondolas) are easily driven into the nailing grooves and can be readily removed.

High Rust Resistance—NAILABLE STEEL FLOORING is safer from rust because it's made from N-A-X HIGH-TENSILE steel which has three to five times the corrosion resistance of plain carbon steel and more than twice that of copper-bearing steel.

Combining nailability and strength, NAILABLE STEEL FLOORING does the job of both wood and conventional steel plate floors—and does each of them better. It saves money in operating as well as maintenance costs. When your next new car or rebuilding program comes up specify NAILABLE STEEL FLOORING.

NO TORN UP PLATES. This photograph shows gondola service at its roughest. Big clamshells like this ten-ton giant often tear rivet heads out of steel plate floors and rip up the cover plates. NAILABLE STEEL FLOORING *cannot* be torn up because it has no projecting rivet heads, no plate edges.

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RAILWAYS' EARNINGS MADE POOR START IN 1949

The best test of how a company or industry is doing is, of course, its net operating income. The only statistics of the Class I railway group for 1949 yet available are for the first quarter of the year. They show that the railways have made a very poor start this year. Net operating income of all Class I roads in the first quarter was \$128,000,000. This compares with a first quarter average of over \$188 million in the decade 1921-1930, inclusive, when a dollar was worth twice as much as now, and with over \$142 million in 1948. Railways in the Eastern district earned \$53 $\frac{1}{4}$ million in the first quarter of 1949 as compared with an average of \$81 million in 1921-1930, and \$33 million in 1948. Railways in the Southern district (including the Pocahontas region) earned \$46,729,000 as compared with an average of \$46 million in the decade 1921-1930, and almost \$50 million in 1948. Railways in the Western district, owing largely to the terrible winter storms, made only \$28,420,000 as compared with an average of over \$61 million in the decade 1921-1930 and almost \$60 million in 1948.

Internal Difficulties

The poor results with which the railways started the year were due to *internal* and *external* influences both of which present very difficult problems to the managements. In fact, these problems are so many and

difficult that only the success with which the managements have surmounted great difficulties and solved great problems during the war period and thus far during the postwar period justifies confidence that the industry will come safely through the period of readjustment for business in general and for the railways in particular in which we are now pretty far advanced.

The chief *internal* difficulty presented to railway management is the terrific increase in costs that has occurred in the postwar period due to advances in wages of labor and prices of equipment and materials. Other industries have suffered comparable increases in costs, but in most instances they have been able to offset or more than offset them by advances in prices which exceed the advances in rates that the railways have been allowed to make. And the railways are facing another huge increase in their labor costs when the 40-hour week for non-operating employees goes into effect next fall.

There are two *apparent* remedies for the situation presented—viz., an increase in the *productivity per hour* of employees and further advances in rates. An increase in *productivity per hour* could be accomplished by harder and more efficient *work per hour* by employees, but is mainly dependent on improvements in the equipment, tools and other facilities with which employees do their work. Such improvements can be effected only by large capital

expenditures; and since the war years the railways have been making, and are still making, the largest annual capital expenditures in their history. The size of these expenditures, measured in money, has been partly due to high costs of labor and materials, but even measured in quantities of equipment and other new and improved facilities acquired and installed, the improvements made probably have been unprecedented. The capital invested has been derived partly from current net income, partly from cash and temporary cash investments accumulated during the war, and partly from the sale of equipment notes. How rapidly management has been converting working capital accumulated during the war into fixed capital is indicated by the fact that the total cash and temporary cash investments of the Class I roads declined from \$2,873 million to \$1,939 million between January, 1945, and January, 1949—i.e., \$934 million, or one-third. Obviously, this source of capital for improvements cannot be depended on much longer.

Problems Externally Created

Doubtless large amounts of equipment notes could still be sold; but efficiency in development and operation requires that increase and improvement in equipment be accompanied by corresponding expansion and improvement of tracks, yards and all permanent structures used in moving equipment. That is one serious trouble with the proposal of Colonel Johnson, the director of the Office of Defense Transportation, that government finance acquisition of a large amount of equipment. What the railways most need is means of financing expansion and improvement of the permanent structures with which equipment must be moved. And there is presently no apparent solution of *that* problem of financing excepting an increase of net operating income.

The *external* influences presenting problems of great difficulties to railway management are (1) government regulation of transportation and (2) government policy regarding taxation and transportation subsidies. There has been much less reason recently to complain about the Interstate Commerce Commission's sloth in trying to readjust railway rates to costs than there was a few years ago; but recent results of the railways show that there is still need for more of such readjusting and it will become even more necessary when the 40-hour week for non-operating employees goes into effect.

The railways are being hard hit by regulation by another government body—i.e., by the decision of the Federal Trade Commission outlawing basing point prices, the effects of which on the railways and other industries demand its reversal by congressional legislation. And the *net deficit* incurred by the western lines as a whole in January and February, which so adversely affected their net operat-

ing income in the first quarter, forcibly calls attention to the effects of the discrimination practiced by government against the railways and in favor of all less important and less essential means of transportation. The western lines incurred this deficit because they were obliged, *at their own expense*, to fight the terrible storms, snow and ice of last winter, while government, *at the expense of the taxpayers*, was fighting the storms, snow and ice, for the operators of commercial transportation by water, highway and air. In addition, while the railways are finding it necessary to advance their rates to offset increased costs of providing and maintaining their highways, they are having traffic and earnings that they need taken from them by operators of boats, buses, trucks and airplanes who are aided in undercutting railway rates both by the heavy taxation imposed by government on the roadway and tracks of the railways, and by the provision by government of the corresponding facilities used by other carriers at less than cost or no cost at all to these other carriers.

Railway managements have accomplished marvels in solving both the internal and the external problems with which their industry has been confronted in the past. They will need quite as much energy, ability, resourcefulness, and cooperation with each other and cooperation from their suppliers and customers as they have needed in the past to solve the problems with which they are now confronted. There is at present no reason to doubt that the needed energy, ability, resourcefulness and cooperation will be forthcoming, as heretofore, excepting that the nature, magnitude and difficulty of the problems presented do not seem to be understood by most business men and public men whose understanding of them is greatly needed.

YARD LIMITS IN C. T. C.

In some industrial switching areas in centralized traffic control territories, several railroads are improving safety and eliminating considerable delay to fast freight trains by abolishing yard limits, thereby "lifting" Rule 93 as applying to certain sections. This, for example, has been done on the St. Louis-San Francisco in the 4.5 mi. between East Tulsa, Okla., and Rice, formerly yard limit territory where several industrial spurs lead from the main track. This section of track lies within the centralized traffic control installed last year on 75 mi. of single-track main line between East Tulsa and Afton, Okla., which includes electric locks on the hand-throw switches leading to the spur tracks. While serving an industry between East Tulsa and Rice, switch engines must clear the main track, place the switch normal and lock it, in order for the dispatcher to clear signals for trains on the main track.

When main track signals are to be cleared, have been cleared, or when a train is occupying the main track between East Tulsa and the next power siding, an electric lock on any of the spur track switches cannot be released to permit a switch engine to enter the main track. Accordingly, the switch engine cannot, through carelessness, "bob out" suddenly on the main track as a through train approaches. Therefore, the C.T.C. system includes protection to prevent the type of accidents for which Rule 93 was written for territory where no such signal protection is in service.

With this protection, the Frisco has removed the yard limit boards previously designating the East Tulsa-Rice section and, accordingly, Rule 93 does not apply in this territory. Now, second class trains, such as important through freights, pass through this section at maximum permissible speed—50 to 55 m.p.h.—rather than at reduced speed prepared to stop short of train or obstruction. Also the work of switch engine crews is expedited and there is an overall improvement in safety. These are some of the indirect, but worthwhile, benefits of centralized traffic control.

NON-SKID FOOTING NEEDED IN STOCK CARS

There are 66 individual things, all of them bad, which can happen to live stock in shipment from grower to packer, according to the report of the chairman of the National Live Stock Loss Prevention Board, Dr. W. J. Embree, agricultural representative of the New York Central. These hazards, he said, cause an annual meat loss to the nation of \$25 million, about half of which is caused by slippery floors in chutes and alleys, stock cars, and trucks.

Just how much of this loss occurs in stock cars alone is unknown, but it undoubtedly reaches a substantial figure, judging by claim payments which railroads make to live-stock shippers each year.

It has long been recognized that a permanent non-skid floor for stock cars would be a good investment, and many devices and materials have been tried—Dr. Embree has tried 28 of them. Sand bedding, supplemented with straw during the winter months, has continued to be the most satisfactory and widely used because of its non-slip properties, and in spite of numerous disadvantages.

In the first place, the time and cost involved in cleaning out old bedding and applying new constitutes an appreciable charge against every car of live stock shipped. Without the sand, cleaning would be greatly simplified. Some sand, carelessly selected,

becomes almost a silt when wet and actually promotes rather than prevents slippery conditions. Moreover, in other instances of neglect, fermented old winter bedding, in conjunction with extreme heat and animal exhaustion, has caused heavy losses in the shipment of such stock as fat hogs.

As in most problems associated with the design and use of railway equipment, the question of economics is fundamental, and doubtless a satisfactory non-skid stock-car floor covering would have been developed long ago except for the necessity of making it economically, as well as mechanically, practicable.

Some fairly substantial expenditures would seem to be justified, however, if the improvement makes a real dent in claim payments, possibly increases floor life, or proves self liquidating through reduction in stock-car bedding and cleaning costs.

Stock-car floors are subject to exceptionally severe service conditions and, according to Dr. Embree's report, often last only five to seven years, the renewal cost being about \$150 for one deck, or \$300 for a double-deck car. He cites promising results with a permanent non-slip material which can be applied to worn floors at about one half the cost of new floors, after which the floors will give another full period of service life.

In tests of four cars equipped with this material and used continuously in live-stock service since last June, no sand bedding was used, summer or winter, and the car floors retained their non-slip properties due to hard aggregate particles imbedded in softer matrix material which, as it wears, constantly brings new abrasive particles to the surface. Dr. Embree estimates that the application of this material to a double-deck stock car will pay for itself through savings in bedding cost, alone, while handling 50 loads.

Railways must have freedom to meet the competition of waterways, highways, and airways, all of which are indirectly subsidized by their enjoyment of facilities provided at the cost of the government, and which contribute relatively little to the tax revenues of governments, either federal, provincial or municipal.

Rates made to meet such competition, provided they be no lower than is necessary to retain the traffic and provided they return to the railway something more than the out-of-pocket cost of the service, are of benefit to the general public as well as to the railroad because they make a contribution to the overhead expense which would otherwise have to be borne by the rest of the traffic of the country. On the other hand, to argue that because such rates are made to meet direct competition, rates must be reduced in other territories where no such competition is met, and which are reasonable rates for the movements involved, would be to invite immediate and overwhelming disaster to the railways.

—George A. Walker, chairman, Canadian Pacific



Key-punch group cuts cards from wheel, interchange and junction reports. Punches retain repetitive information and automatically record it in cards

Car Records on Tabulating Equipment

Several printing tabulators are shown at work in the office of the superintendent of car service, turning out per diem reports and private line statements. At extreme left, cards have whisked through high speed sorters at the rate of 25,200 per hour



Per diem reports, locomotive train-hour reports and many other transportation statistics are compiled by mechanical means

By D. J. SPOWART
Superintendent of Car Service,
Western Pacific



Installation by the Western Pacific of mechanical equipment for handling car records has cut the cost of this work, raised efficiency in preparing statistical material—thus giving management more accurate figures at earlier dates—and, far from least important, has almost eliminated clerical turnover, which, before this equipment was installed, gave us a great deal of trouble. Rental of this equipment, plus the cost of the cards used, is figured as the equivalent of seven clerical salaries, and six months after the installation was made we had reduced our clerical staff by ten persons, and our turnover practically ceased. As the amount of work increased, both car record and other, we held to the same personnel, but it is our belief that if the old manual system had been continued we would have had

Right—Interchange cards actuate the tabulator which automatically subtracts receipt from delivery, producing the summary of per diem due on each car

Below—Into this card is punched all the desired information from conductor's wheel reports, both freight and passenger

PER DIEM REPORT

Case of 6545 Month of Feb 1949

CAR	DAYS	CAR	DAYS	CAR	DAYS	CAR	DAYS
NUMBER	PER DIEM	NUMBER	PER DIEM	NUMBER	PER DIEM	NUMBER	PER DIEM
4257	2	5570	4	8878	1	9119	4
4281	7	5572	2	8920	5	9120	1
4308	2	5579	5	8933	2	9130	4
4317	1	6772	2	8939	1	9131	1
4347	4	6775	4	8957	4	9134	1
4359	2	6788	4	8970	2	9135	2
5211	2	6793	7	9004	3	9138	2
5212	2	6799	2	9015	5	9147	2
5217	2	6805	1	9017	1	9148	2
5266	2	6817	8	9018	1	9150	3
5277	4	6819	3	9018	2	9153	3
5284	2	6826	3	9022	1	9155	3
5287	6	6836	3	9031	3	9163	3
5289	4	6849	3	9037	1	9164	3
5296	3	6880	5	9039	7	9168	1
5300	2	6889	1	9041	5	9170	3
5329	2	6891	3	9045	1	9176	3
5331	1	6898	1	9047	1	9181	3
5340	2	6900	1	9051	1	9182	3
5342	2	6973	1	9052	2	9187	1
5353	6	6991	1	9057	2	9188	1
5366	9	7014	1	9058	1	9190	1
5372	2	7089	4	9058	3	9194	1
5385	4	7090	5	9058	2	9196	2
5411	6	7111	1	9061	2	9197	2
5421	1	7125	1	9063	2	9203	2
5422	1	7187	1	9070	2	9205	2
5432	3	7369	1	9071	3	9207	2
5431	1	7901	1	9075	3	9210	2
5455	1	7959	2	9077	1	9215	2
5458	2	7967	2	9082	1	9218	2
5475	4	8329	1	9083	1	9224	2
5508	2	8589	1	9088	5	9226	2
5510	2	8593	2	9099	3	9231	4
5523	5	8647	2	9099	1	9232	2
5524	1	8749	2	9094	1	9234	2
5545	1	8758	2	9096	2	9235	2
5547	1	8811	1	9100	1	9245	2
5553	3	8848	1	9101	1	9247	2
5577	3	8855	3	9108	1	9248	2
5566	2	8876	5	9112	1	9254	3
				9118	3		

TOTAL OF SHEET 487

SUMMARY
Per Diem _____ Days at _____ Cents per Day, \$ _____

D. J. SPOWART,
Superintendent Car Service

Remington Rand P-12230 BNT

WHEEL AND BARGE CARD

2

WHEEL AND BARGE CARD

3

WHEEL AND BARGE CARD

4

WHEEL AND BARGE CARD

5

WHEEL AND BARGE CARD

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WHEEL AND BARGE CARD

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CAR RECORD											
CAR INITIAL	L OR EMPTY	INTERCHANGING ROAD	CAR NUMBER	MO	DAY	TIME RECEIVED	STATION FROM	STATION TO	TIME DELIVERED	DATE DELIVERED	PER DIEM PER OR CONTRA
ATA	L	AT	5274	3	03	91	92				1
ATA	L		5274	3	03	140	92	281	83	5	3
ATA	L		5274	3	05	23	281	4112	83	1	5
ATA	L	GN	5274	3	05			4112	83	15	27
ATA	L	AT	5276	3	14	70	92			1	14
ATA	L		5276	3	14	110	92	136	142	14	14
ATA	L	SP	5276	3	14			136	142	14	14
ATA	L	AT	5282	3	06	102	92			28	7
ATA	L		5282	3	06	142	92	281	12	7	6
ATA	L		5282	3	07	22	281	4112	75	7	
ATA	L	GN	5282	3	07			4112	75	7	7
ATA	E	GN	5282	3	13	233	4112			1	13
ATA	E		5282	3	15	21	4112	281	115	15	
ATA	E		5282	3	15	130	281	92	35	16	
Incomplete Record										519899	887
ATA	L	AT	5299	3	13	81	92			1	13
ATA	L		5299	3	13	141	92	281	52	14	
ATA	L		5299	3	14	74	281	4112	161	14	14
ATA	L	GN	5299	3	14			4112	161	14	14
ATA	L	AT	5302	3	02	115	92			42	17
ATA	L		5302	3	02	144	92	281	92	3	2
ATA	L		5302	3	03	115	281	4112	212	3	
ATA	E	GN	5302	3	10	2	4112			1	10
ATA	E		5302	3	10	32	4112	281	121	10	
ATA	E		5302	3	10	140	281	92	150	11	
ATA	E	AT	5302	3	11			92	193	11	11
Incomplete Record										579899	997

Car record books, printed on the tabulator at the rate of 6,000 lines per hour, contain complete chronological histories of system cars and cars of foreign ownership

to add another nine clerks to the staff we had at the time this system was inaugurated. Another important benefit has been our escape from penalty payments for failure to have per diem reports ready on time.

These improvements have been accomplished through the use of Remington Rand punched-card (tabulating) equipment. From the start our reports were more complete, clear and accurate than when they were prepared manually.

To do the job required it was necessary to place in service several manually operated card punches; a sorter which separates or groups the cards, according to needs, at a rate of 25,200 an hour; and a tabulator which prints, adds or subtracts as it goes along, at the rate of 6,000 complete lines (of up to 100 characters each) per hour. Supplementing these three basic machines are the interpreters, summary punches and a reproducing punch which are used for automatic extension of the basic tabulating machine functions.

Using these machines, we prepare a daily car report. Since the W. P. uses the 1-to-24-hour numbering method, it is a simple matter to trace, from this daily car record, the movement of any car coming on line at any point and at any hour, along with the train in which it moved, and the point and hour at which it left the line. So accurate is our new record that we never have to refer back to wheel, junction or interchange reports. Considerable clerical time is thus saved.

As foreign-road cars come onto the W. P., interchange reports show date, point and time received and whether loaded or empty. Cards are punched for each car and, after the daily car report is made, the cards go to file. As cars go through each junction point on the Western Pacific that information comes to San

Francisco and again cards are punched, to be used in preparing daily car reports. As the car leaves the line still another card is punched. Then at the end of the month summary cards are automatically made for each foreign car and the summaries are used to prepare per diem reports to car owners. For Western Pacific cars on foreign lines the system works the same way, except, of course, that interchange reports come from the foreign lines. Using the same procedure, the W. P. then produces a report of the activities of its cars off line, thus gaining quickly a check on the accuracy of the per diem report of foreign lines to us.

The fact that unit and summary cards may be re-used for statistical purposes played an important part in our decision to use this equipment. These same factors make it possible to add other applications without over-burdening the tabulating department.

In addition to using this equipment for handling car records, we have, for some time, been using it to make reports of gross and net ton-mileage, locomotive power and fuel reports, passenger car mileage, locomotive train-hours, locomotive ton-miles, and locomotive mileage by principal, helper and light service.

Railroad rates are still out of line as compared with charges for other products and services. Only when they are adjusted to proper levels, will we be able to make those large advances in improvements and efficiency which, in turn, will substantially increase earning power.

—M. W. Clement, president, Pennsylvania, in a message to P.R.R. stockholders

This is the visible type card stock record used by the Canadian National. After stock is taken and extensions are made inventory figures are entered in upper right hand corner of the card. All items are then double checked

Error-free method of transcription used; typing eliminated

2560 Copper Lead, 250 Amperes										96	29.00	27.84
The Devco Electric Switch Co.										QTY	PRICE	AMOUNT
										25	2-3	11.0
19	QTY	DATE	ORDERING	REC'D	QTY	DATE	ORDERING	REC'D	QTY	DATE	ORDERING	REC'D
			JANUARY				JANUARY				JANUARY	
			FEBRUARY				FEBRUARY				FEBRUARY	
			MARCH				MARCH				MARCH	
			APRIL				APRIL				APRIL	
			MAY				MAY				MAY	
			JUNE				JUNE				JUNE	
			JULY				JULY				JULY	
			AUGUST				AUGUST				AUGUST	
			SEPTEMBER				SEPTEMBER				SEPTEMBER	
			OCTOBER				OCTOBER				OCTOBER	
			NOVEMBER				NOVEMBER				NOVEMBER	
			DECEMBER				DECEMBER				DECEMBER	
										TOTAL		

CHS 4465
PRINTED IN CANADA
ATA-STYL CORP.
SUSPENSE

CANADIAN NATIONAL RAILWAYS

REMARKS

PRODUCTION CODE

C.N.R. Has Cut Expense In Taking Inventory

The stores department of the Canadian National has reduced its expense in taking inventory by more than \$4,000 yearly. This saving has been made possible through the use of visible-type stock records—instead of the old-type stock book—and a camera which photographs the pertinent portions of these records. In addition to these savings, this method is said to eliminate all chance of errors which used to occur when the transcription of inventory figures was made from stock book pages and work sheets to inventory recapitulation sheets. In addition, the record is said to be tamper proof.

The stock records for 60 items can be carried on one panel of the type shown under the camera in Fig. 2. Panels are photographed at the rate of 12½ per man-hour, which means that approximately 750 items can be transcribed to "recap" sheets in that time. A competent typist will transcribe about 120 per hour. The

man-hour savings are proportional. In addition, the taking of inventory is done in a much shorter time than before this system was established and final figures are available at an earlier date.



Once verifying has been done whole panels of cards are taken to the camera where they are photographed three at a time as shown here. Every time the shutter snaps a record has been made of inventory for approximately 180 items. The cost of labor, chemicals and film is said to be about 19 cents per panel

A section of one panel as photographed. Note verifications placed at bottom of each panel

Sole, Mustard	18	21	3.78
Rings, Napkin Silver	77	20	15.40
Tops, Bottle	10	150	15.00
Dredges, Sugar	9	75	6.75
Shakers, Salt Aluminum	12	12	1.44
Shakers, Pepper Aluminum	8	8	.64
Spoons, Soup	12	12	1.44
Spoons, Tea	12	12	1.44
Spoons, Table	12	12	1.44
Crackers, Nut	12	12	1.44
Servers, Apperagus	12	12	1.44
Scoops, Cheese	12	12	1.44

Inventory of Material on Hand
Store Stock, O. T. Halifax, N. S.
October 31, 1936

Section B

Listed & Priced *PH*

Listing transferred *PH*

Extended *PH* Added

Extensions checked

Additions checked

Total Sheet No. *75* 110098



Fig. 1. View of a portion of the machine room in the Auditor of Revenue's department. Electric calculating punch is in left foreground

By **J. G. WORMICK**
Auditor of Revenues, Reading

MACHINES PRORATE FREIGHT REVENUES

Work more accurate and completed long before deadlines, with no overtime—Typing, checking and adding of abstracts eliminated

In the complicated work of prorating interline freight revenues between the various carriers, which on transcontinental traffic may involve division of revenues among as many as ten lines, the Reading has made improvements that have eliminated entirely the thousands of hours of overtime which formerly attended this monthly job. At the same time closing dates on the work have been moved up several days.



The Author

These results have been accomplished through addition of International Business Machines' electric calculating punch—which mechanically performs the

work of prorating—to the I.B.M. equipment we have had for a number of years. To date, complete mechanization has been possible only where two or three carriers are involved, i.e., direct connections, the Reading, of course, being the terminating carrier. Where more than three carriers share the revenue on a haul some manual work is involved, but the calculating punch does much faster work than used to be done by comptometer operators. Thus, even this portion of our work has been speeded and made more economical.

Abstracts for Direct Connections

When the auditor of revenues receives waybills from Reading agents, with freight bills attached, those waybills are registered and coded for commodity, route, etc. From these documents accrual cards are punched. (See Fig. 2.) (This is the basic document from which, directly or indirectly, all others are prepared.) On a trip through the alphabetic printing machine the accrual cards prepare the accrual sheets (See Fig. 3), which are a summary of the waybills received from agents, with the total revealing the debit against the agent for one day. At the same time a

Fig. 2. This is the accrual card, the only document manually prepared in prorating revenue for direct connections

Fig. 3. The accrual sheet

Fig. 4. Master header card is a pre-punched card which has the percentage of revenue due each participating carrier punched into it

Fig. 5. All the information on the abstract of interline waybills received, is manually placed on the form when the division of revenue is for more than 3 roads

IT'LL HOLD JUST SO MUCH...!



daily total accrual summary card, which shows daily total charges against each agent, is prepared by the summary punch. (The work thus far really is the basic station accounting portion of the auditor of revenues' work.) From this point on all documents are automatically prepared, if the proration involves no more than three roads, including the Reading.

Once the accrual summary card and the accrual sheet are prepared, the accrual cards are run through a duplicating punch machine which produces a settlement card, i.e., a card which will be used in the actual breakdown of the revenues between no more than three roads. These settlement cards are automatically collated with a master header card (See Fig. 4) at the end

After the way the railroads "came through" during the recent storm period when all other forms of transportation were practically out of business, it would seem that the public—meaning all of us—would quit bedeviling them. . . .

Too many people have come to look upon the railroads in recent years as supplemental transportation, to be used only when other forms are inconvenient or unsafe.

They have been harassed by government, labor boards, high costs, high wages, scarce materials and all the other ills with which industry may be confronted.

Railroads are operated, not by some mythical board in a metropolitan skyscraper, but by real men who work and live like the rest of us. They have the three-way job of providing service, trying to make a little money for the stockholders and meeting the wage and other demands of hundreds of thousands of employees.

of the month and then put through the electric calculating punch which simultaneously computes and punches into the settlement cards the proportion of the revenue each railroad is to receive. (This latter is done at an average rate of 600 calculations per hour.) Then, in order to produce the abstract of interline waybills received and the settlements summary card, these cards are run through an alphabetic printing machine which turns out the required documents. (Heretofore the abstracts were manually typed, checked and added.)

The settlements summary card is used to print the recapitulation of abstracts of interline waybills received from stations, and at the same time as this "recap" is being made the summary punch produces a road summary card. The summary for each carrier is balanced to the total from original accrual cards. Settlement summaries are then used to prepare the "recapitulation of intermediate road proportions," and the sum of these intermediate recaps is balanced to the summary of abstracts of interline waybills received by the various Reading agents.

Non-Direct Connections

Where more than two railroads in addition to the Reading are concerned in the division of the revenue we have been forced to devise a somewhat different procedure, in which we utilize the Bridger card plan. Main road cards (origin and settling carriers on one card) are key punched from the abstracts (See Fig. 5), with all pertinent information including billing and settling road percentages. Intermediate line percentages and code only are punched into separate cards for each other participating carrier, while common information is automatically punched from the main road card. All cards then go through the electric calculating punch, which places on the main road card the Reading's proportion and the billing line's share, while on the cards for the intermediate carriers it punches the amount due to those lines.

From this point on the procedure is the same as when making the breakdown for direct connections, except that proportions due each road are manually transferred to abstracts from the "recap" of abstracts of interline waybills received from stations. Experiments are under way to devise a means of handling all interline abstracts from tabulating cards in the same manner as is done for direct connections.

How long can they last and how soon will "we, the people" be in the railroad business through government ownership? If they are forced to give up because of unseemly demands, the railroads will have to be nationalized, as England has done.

And if government takes over the railroads, it will take over other forms of transportation and general business. Then where will taxes come from to support government?

It might be well to "lay off" the railroads for a little while, at least, and allow them to recuperate from the tremendous losses they have sustained from storms and other unforeseen hazards.

We might find ourselves in the railroad business and we don't want to be—if we're smart, that is.

—Alliance, Neb., Times-Herald

TEST OF COACH TEMPERATURE CONTROLS

C. & N.W. coach in "Los Angeles Limited" demonstrates close temperature regulation and uniform space heating with electronic system of control

In August, 1947, the Minneapolis-Honeywell Electronic Comfort Control system was installed on Chicago & Northwestern Coach No. 6133 in revenue service between Chicago and Minneapolis. On March 8, 1949, this car was attached to the "Los Angeles Limited" of that road and the Union Pacific to test the performance of the temperature control system under the varying conditions of temperature and sun load encountered in a trip from Chicago to Los Angeles. The car left Chicago at 12:01, C.S.T. March 8 and arrived at Los Angeles at 3, C.S.T.* March 10. It was normal revenue service during the entire trip. The principal instrument used in this demonstration was a Brown multiple-point record-

ing thermometer, which rapidly measures and records temperatures at various points throughout the car.

The comfort control system comprises the following features:

1. Hot water instead of steam is contained in the radiators along the floor to permit moderate temperatures to be maintained at that level. A small motor-driven pump supplies positive circulation for even temperature distribution. A Prestone solution is used for freeze-up protection.

2. A thermostat in a window on each side of the car measures the chilling effect of the cool walls and windows, and maintains the hot water in the radiators at a temperature which offsets these chilling effects. Both sides are completely independent of each other so that the same comfort level can be maintained even with the

* For clarity as to duration, Central Standard Time was used throughout the test.

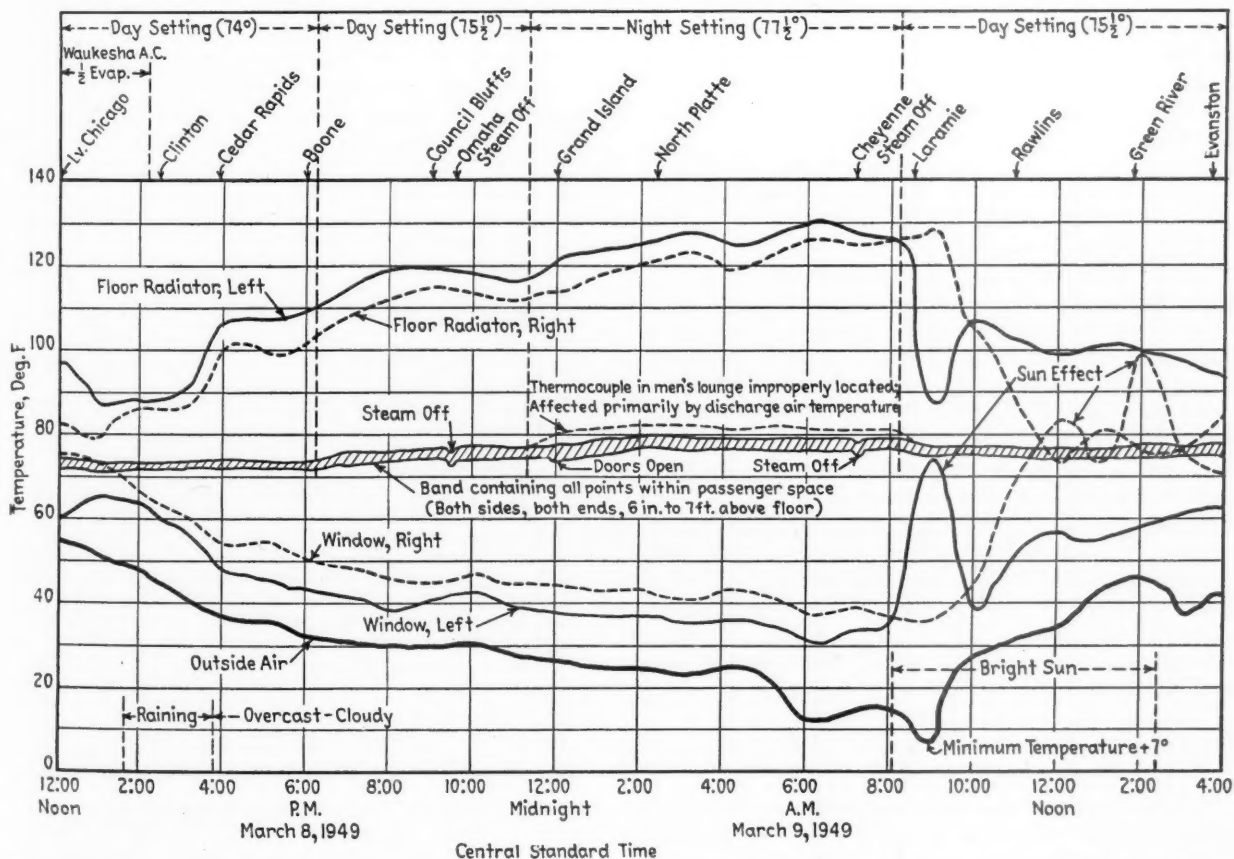


Fig. 1. How the floor radiators respond to variations in outside temperature and to the effect of the sun on the side of the car

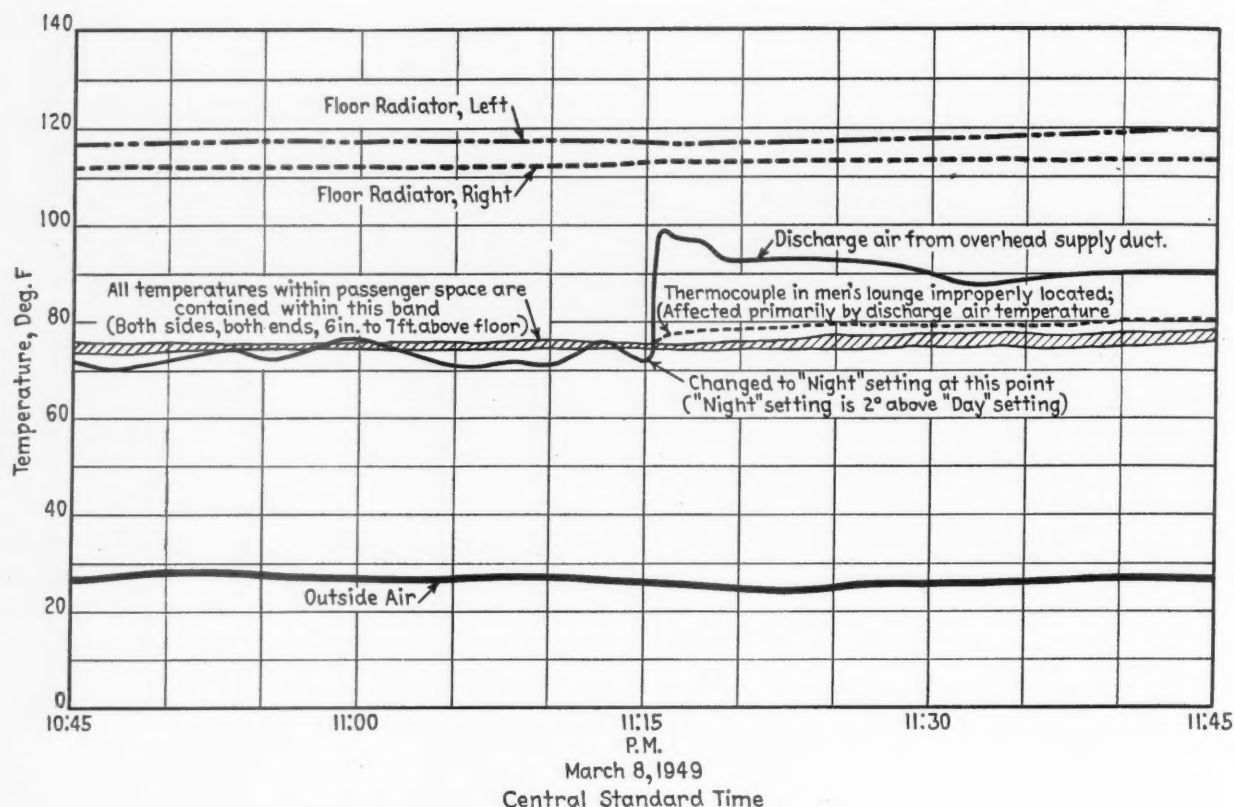


Fig. 2. The overhead system responds rapidly to a change in temperature setting

sun shining brightly on one side and a cold wind blowing against the other.

3. A third independent heating system in the car is the overhead warm-air circulating system. This supplies fresh air for ventilation purposes and provides a final adjustment for comfort conditions, since the temperature of the air supply is controlled by a thermostat located within the passenger space in the car.

4. All steam valves are of the motor-driven, modulating type, which admit only the exact amount of steam necessary to produce comfort by replacing heat losses. The floor-heat valve meters steam to a heat exchanger which heats the circulating water, while the overhead valve meters steam to a coil which heats the circulating air before it is discharged into the car.

5. The system employs electronic control which can sense temperature changes as small as one-tenth of one degree and adjust the heat supply to balance that change exactly. The thermostat is merely a coil of wire with no moving parts. Temperature changes are corrected before they affect car space by a thermostat located where it can measure outdoor air changes and make corrections in heat supply before those changes are reflected in the car temperature.

Test Equipment

The Brown Recorder measures 24 consecutive temperatures at various points inside and outside the car. Wires are run from the recorder to thermocouples at each of these points. The recorder can be set to print

automatically readings at all 24 points in succession continuously, or it can be set to print readings at only one point continuously. The automatic printing of 24 points requires about one minute. The recorder also can be operated manually to indicate the temperature at any desired thermocouple location.

The thermocouple locations are:

1. Overhead discharge air
2. Outdoor air intake
3. Outdoor air right side
4. Outdoor air left side
5. Right side, top of seat
6. Right side, bottom of seat
7. Left side, top of seat
8. Left side, bottom of seat
9. Men's lounge
10. Women's lounge
11. Car thermostat, blower end
12. Car thermostat, opposite end
13. Window, right side
14. Window, left side
15. Floor radiator, right side
16. Floor radiator, left side
17. Right side, top of seat
18. Right side, bottom of seat
19. Left side, top of seat
20. Left side, bottom of seat
21. Men's lounge
22. Women's lounge
23. Car thermostat, blower end
24. Steam supply pipe

In addition to the Brown Recorder, several small, portable recording thermometers were located around the car to give continuous temperature records for single points. Mercury thermometers were used to give approximate spot checks on any desired points and to permit

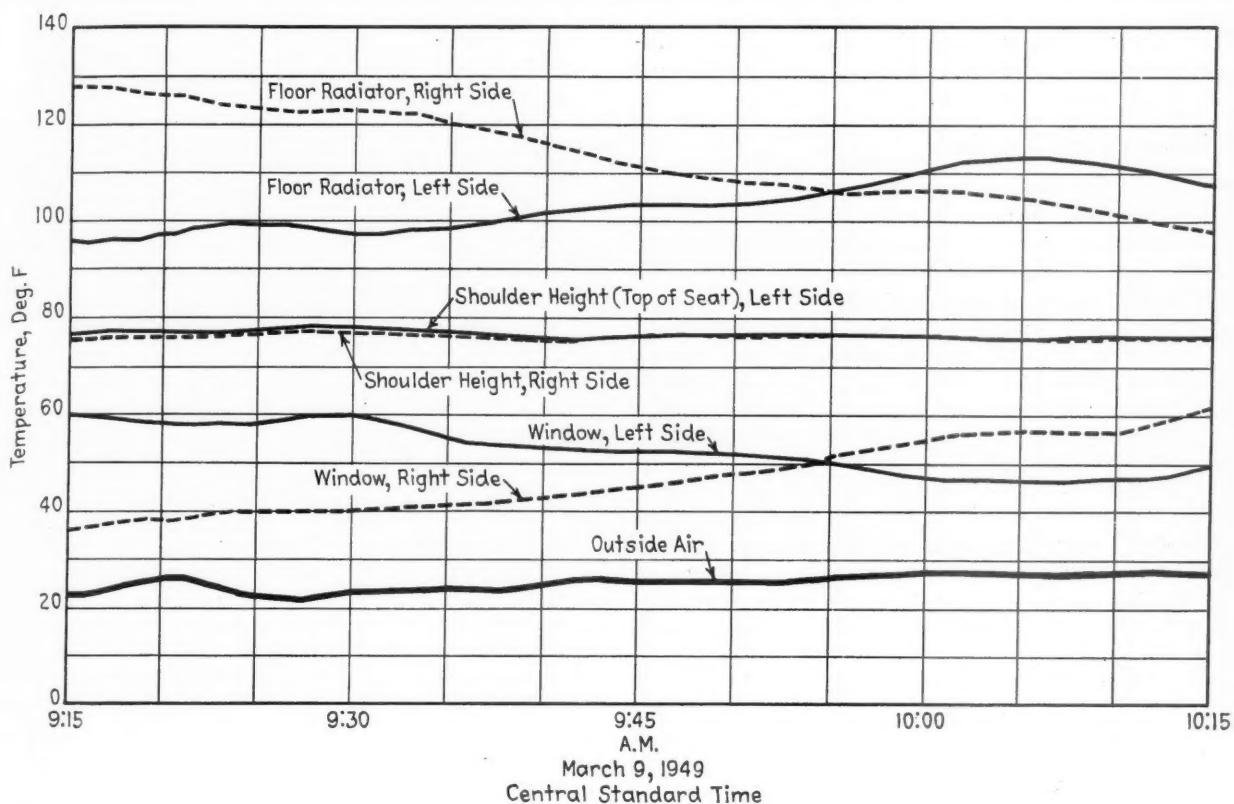


Fig. 3. A reduction in floor radiator temperature compensates for sun effect to maintain nearly identical temperatures on both sides of the car

continuous checking of the calibration of the Brown Recorder.

The recorder was operated continuously during the entire trip recording temperatures at all thermocouple

locations in sequence, except during short intervals when it was recording a continuous record of a single point, and when readings were being taken for a log sheet by manually impulsing the instrument from point to point.

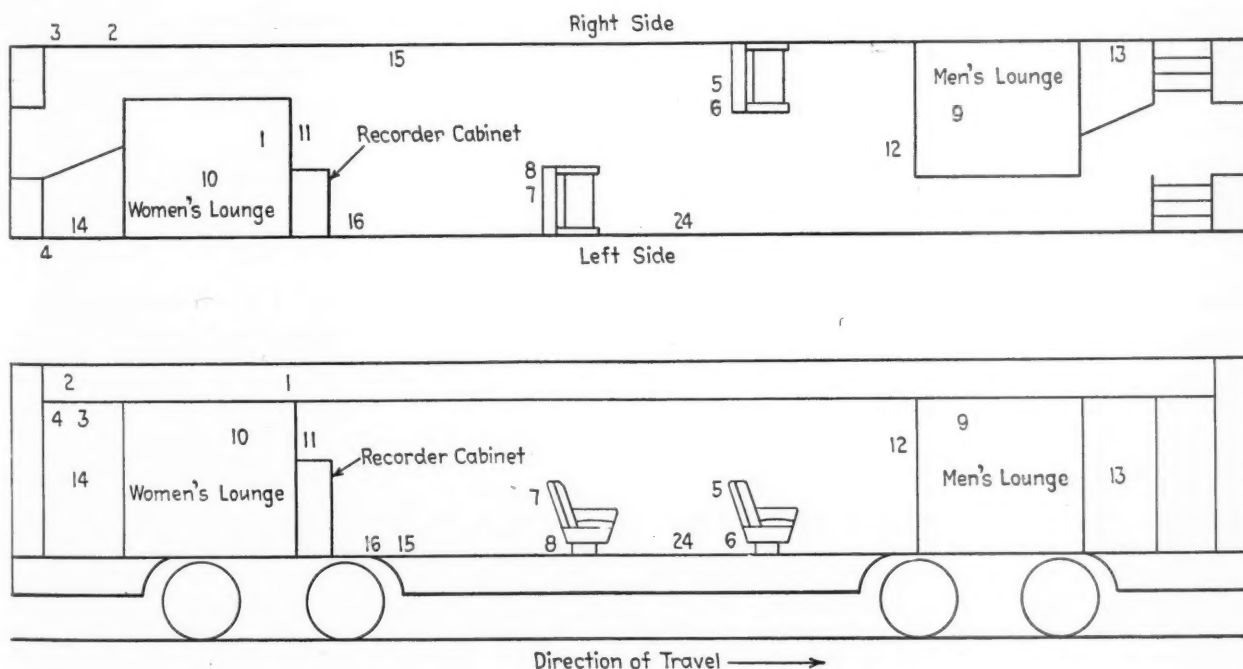


Fig. 4. Location of the thermocouples and recorder cabinet in the car for testing the heat-control system

The manual readings were taken only to obtain a condensed picture of conditions on the trip to be distributed to participating personnel.

Summary of Results

Temperatures were measured at heights from 6 in. to 7 ft. above the floor, on both sides and both ends, and in the lounges. All were continuously within the comfort zone from 71 to 77 deg. established by the American Society of Heating and Ventilating Engineers, and never was there a difference of more than 4 deg. between the highest and lowest temperatures in the car as long as trainline steam was available. With outdoor temperatures as low as 7 deg., the temperature of the overhead discharge air remained close to the car temperature. The floor radiator temperatures were stable, changing only when a change in window temperature indicated a need for more or less heat. The grill covering the floor radiators never became too hot to touch with the bare hand. A graph of the mean car temperature for the entire trip showed that the only measurable changes in car temperature occurred when the temperature setting was changed (as from "Day" to "Nite") although outdoor temperature varied from 7 deg. to 72 deg.

On Fig. 1, the curves labeled "Window, Right" and "Window, Left" show the temperatures at the inside surface of the windows on each side of the car. In general they follow the trend of the outside air temperature, remaining 10 to 20 deg. above it, except when there is a bright sun shining, in which case the window temperature on the sunny side can rise as much as 70 deg. above the outside air, as it did at 9:00 a.m., March 9. The left side was on the north, which may explain why it is generally a few degrees colder than the right, or south side.

The window temperatures determine the temperatures of water in the floor radiators, shown as the upper two curves in Fig. 1. As the window temperature drops, the floor-radiator temperature on that side is raised a proportional amount to supply the additional heat necessary to prevent the walls and windows from having a chilling effect upon the passengers. At 9:00 a.m., March 9, when the outside temperature was 7 deg. the bright sun had raised the left window temperature to 74 deg., causing the left floor radiator to drop to 87 deg. although the right floor radiator was still at 128 deg. During this time the band of car temperature neither rose, fell, nor widened. Immediately following this, the train changed direction, causing the sun to shine on the right side and causing a similar drop in that radiator while the left side returned to normal.

The thermocouple in the men's lounge was placed in a poor location where its temperature was affected mainly by the overhead discharge air. As a result this point read high during the "Nite" setting when a higher discharge air temperature is necessary to maintain the 2-deg. higher car temperature. However, mercury thermometer readings and passenger surveys indicated that this room was also within the band on the chart and comfortable. The women's lounge is shown to be within the band on both "Nite" and "Day" settings.

After six hours of the test had elapsed, a survey among passengers and railroad personnel observing the demonstration seemed to indicate that the 74 deg. setting was slightly too low, so it was raised to 75½ deg.

at 6:15 p.m., March 8. It was not touched again during the entire trip except for setting the master switch to "Day" and "Nite" positions.

Fig. 2 shows the stability of temperature of the overhead discharge air that is made possible by a modulating valve. The motor-driven valve admits heat continuously to the overhead coil, varying the amount of steam supplied only as heating-load changes occur, as indicated by the thermostat. The small changes in the first half of the discharge air curve are in response to slight load changes, caused by doors opening, wind changes, train speed, etc., although the total variation in discharge air temperature is less than five degrees.

In Fig. 2, the rapid response of the overhead system is indicated by the nearly vertical portion of the discharge air temperature curve in the center of the chart; changing to the "Nite" setting upset conditions momentarily by calling for a 2-deg. higher car temperature, so the overhead responded instantly by raising the temperature of the discharge air. As the car temperature begins to rise because of the warmer air being supplied, the discharge temperature begins to level off. Equilibrium was again reached at 11:37 p.m., when the "Nite" temperature was reached and the discharge was stable at 90 deg. Sun effect was absent and the outdoor temperature was nearly constant, so there was very little change in window temperatures. Under these conditions the floor radiator temperatures were stable, varying not more than 3 deg.

In Fig. 2 the discharge air is supplied at all times at temperatures close to those in the car. The discharge temperature on the "Day" setting is among or slightly below the car temperatures, while on the "Nite" setting it levels off about 13 deg. above the car temperatures.

By supplying air at a temperature near that of the car, stratification, or the tendency of air to form a warm layer at the ceiling and a cold layer at the floor, is reduced since there is very little difference in temperature between the incoming air and the air already in the car.

Fig. 1 shows the floor-radiator temperatures never exceeded 130 deg., although the outside temperature dropped as low as 7 deg. These moderate floor-radiator temperatures were adequate to prevent the floor from becoming uncomfortably cold, as shown by the lower boundary of the car temperature band which measures temperatures 6 in. above the floor, which remained in the comfort zone of 71 deg. to 77 deg. for daytime, and 73 deg. to 79 deg. for night.

Control Maintains Uniform Temperature

Fig. 3 shows how uniform temperatures are maintained on both sides of the car by means of the window-floor-radiator compensation. At 9:15 a.m. the right window was at 37 deg., the right floor radiator at 128 deg., and the temperature at the seat top on that side was 76 deg. On the opposite side of the car the window was at 60 deg. due to sun effect, the floor radiator was at 96 deg., and the seat top was at 77 deg., or a difference of only 1 deg. inside despite the differences in outdoor conditions on the two sides of the car.

Continuing along Fig. 3, the sun effect changes from the left of the car to the right side because of a change in train direction, resulting in a drop in temperature of the right radiator and a rise in the left. Because of com-

pensation for sun effect, the seat top (or shoulder height) temperatures on both sides of the car remain within 1 deg. of each other.

The mean car temperature for the entire trip as represented by the center of the band on Fig. 1 and 2 (neglecting "steam off" periods) had a total variation slightly less than 1 deg. on any single temperature setting. This stability is facilitated by an electronic thermostat which measures outdoor air temperatures and repositions the steam valve when the outside temperature changes before that change is reflected in the car.

The reduction in the tendencies toward drafts is indicated by Figs. 1 and 2, which show that the air 6 in. above the floor is no more than 3 or 4 deg. cooler than the temperature near the ceiling. Thus there is no appreciable moving layer of cold air along the floor to produce a chilling sensation about the feet and ankles.

Operation of the system was entirely automatic, with no adjustments of any kind necessary after the initial raising of the temperature setting $1\frac{1}{2}$ deg. at Boone, which merely required the turning of a knob by a mem-

ber of the train crew. The Waukesha a.c. compressor was running with half evaporator at the beginning and end of the trip. Change over from heating to cooling and vice versa was automatic, with no resultant change in car temperature. No failures or weaknesses of any kind were encountered on the trip.

Periodically, during the trip, cards were passed out to all passengers in the car explaining briefly what was going on and providing space for the passengers to comment upon their comfort. The cards also provided a place for each passenger to check whether he was occupying an aisle seat or a window seat.

During the first six hours of the trip, when the temperature setting was 74 deg., the cards indicated that 37 per cent of the passengers desired a slightly higher temperature, while 63 per cent replied that the temperature was comfortable. As a result, the temperature setting was raised $1\frac{1}{2}$ deg. Cards received during the remainder of the trip indicated that 90 per cent of the passengers were comfortable, with only 10 per cent desiring some slight change in temperature.

M. W. Smith New President Of Baldwin

Marvin W. Smith, executive vice-president of the Baldwin Locomotive Works since August 1, 1948, was elected president and chief executive officer on May 5. Mr. Smith was graduated from Texas Agricultural & Mechanical College in 1915 with a bachelor of science degree in electrical engineering, after which he joined



Bachrach

Marvin W. Smith

the Westinghouse Electric Corporation. As a student engineer with that company he was selected by the late Benjamin G. Lamme, chief engineer of Westinghouse, for a special course of study in design problems.

From 1917 to 1930, Mr. Smith was instrumental in the development of many important power-generating projects. He was appointed division engineer in 1930 and was in charge of the designing of many large generators such as those for Hoover and Norris Dams. Under his direction, Westinghouse developed the "umbrella" type of construction for large water-wheel generators, now wisely used in low speed hydro-power stations. He was named manager of engineering in 1936 and was elected vice-president in charge of engineering and research in 1939. Westinghouse awarded him the company's order of merit, a medal and citation, in 1938 for his outstanding services.

On July 29, 1948, Mr. Smith left Westinghouse to

accept the executive vice-presidency of Baldwin (see *Railway Age* of August 21, 1948, page 68). Mr. Smith is a member of the boards of directors of Baldwin, the Midvale Company, the Flannery Bolt Company and the Philadelphia (Pa.) National Bank.

Based on a business originally founded by M. W. Baldwin in 1831, the present Baldwin Locomotive Works was incorporated in Pennsylvania in June, 1911. One of the largest domestic manufacturers of locomotives, including steam, electric and Diesel-electric units, the firm also produces, among other things, hydraulic turbines, rolled steel wheels, testing equipment, bronze propeller wheels, steel springs, steel forgings, and castings and ordnance materiel. Divisions and subsidiaries include the Eddystone division at Eddystone, Pa., where the company's general offices are located; the Standard Steel Works division at Burnham, Pa.; the Pelton Water Wheel Company, San Francisco, Cal.; and the Whitcomb Locomotive Company, Rochelle, Ill. For several years Baldwin has owned 383,425 shares, or 63.9 percent, of the outstanding capital stock of the Midvale Company of Nicetown, Philadelphia, which produces various types of steel, including ordnance and armor plate.

During 1948 Baldwin sold to Westinghouse 500,000 shares of its authorized but unissued common stock for \$15.11 a share (see *Railway Age* of August 7, 1948, page 43). As a result, according to the annual report for 1948, Baldwin acquired over \$7,500,000 of added working capital. In addition the report added, "a strong interest has been created at Westinghouse to provide Baldwin with electrical equipment of suitable character at such times as may be necessary to satisfy Baldwin's production schedules." Baldwin's 1948 annual report was summarized in the *Railway Age* of April 9, page 70.



The inspection station as seen from the upgrade side. Note the lean-to shelters for personnel at the ground level

Special "Pits" Aid Freight Car Inspection

Facilities on approach tracks of two classification yards on the Union Pacific permit all parts of moving equipment to be inspected from five enclosed positions

Complete inspection of moving freight cars—underneath, on the sides and on the top—as they pass up the approach track to the crest of the incline is one of the latest techniques to be introduced at retarder classification yards. A pioneer in this practice is the Union Pacific, which has adopted it at the road's new retarder yards at Pocatello, Idaho, and North Platte, Neb., the former having been completed late in 1947 and the latter in the fall of 1948*.

Five Positions at Each Station

At both of these yards an inspection station was constructed on the approach track to the incline, providing enclosed positions where five men may inspect the moving cars in complete safety and comfort.

*The Pocatello yard was the subject of a feature article in *Railway Age* of January 10, 1948, while the North Platte yard was described in the issue of October 30, 1948.

At each yard the approach track is carried on an embankment, and the inspection station embodies a concrete pit or passageway extending entirely through the fill. At the center of the passageway and between the rails is a position from which the undersides of the cars may be inspected as they pass overhead.

Can Look in Either Direction

On each side of the track and reached from the passageway is a pit in which a man may stand at a level convenient for viewing the sides of the wheels and trucks. These pits are each incorporated in the foundation for an enclosed shed which provides another inspection station at a level convenient for viewing the car roofs, running boards, grab irons and brake wheels. A feature of each installation is the use of 13 floodlights, carefully positioned to illuminate all parts of the cars covered by the inspection. Since the inspec-



The inspector under the track views undersides of cars through shatterproof glass

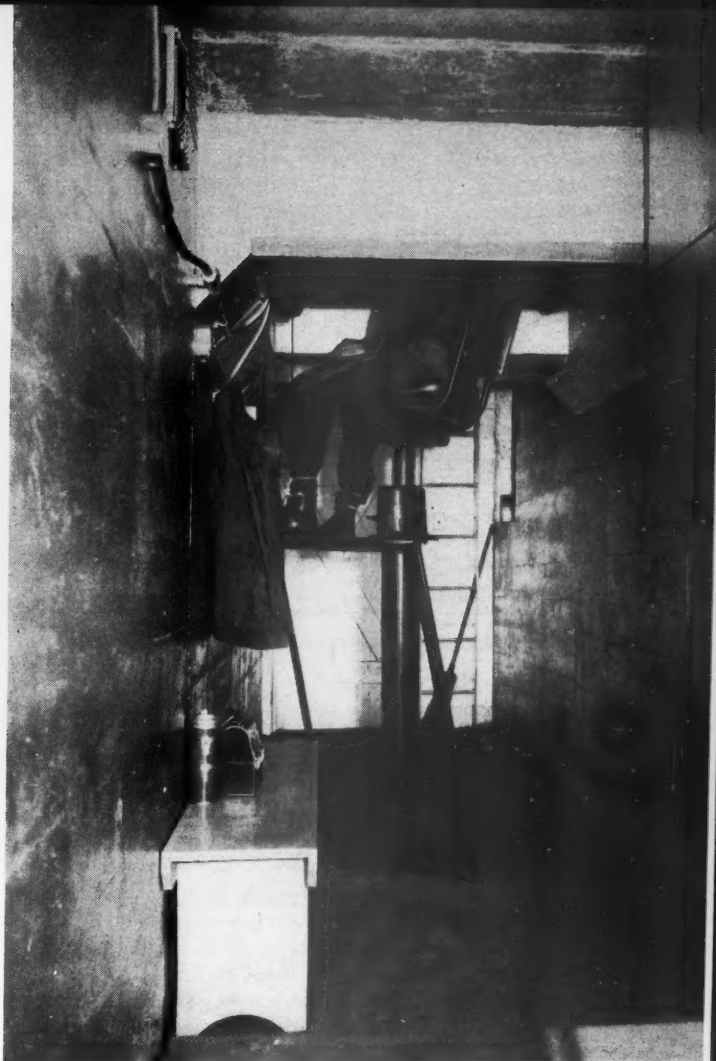
tion stations at the two yards are substantially similar in design and construction, the remainder of this article will deal with the one built more recently—that at North Platte.

The car inspector stationed in the pit between the rails is protected overhead by a welded steel hood incorporating two inclined panels or windows of shatterproof glass, one facing in each direction. He sits in a swivel chair mounted on a steel column supported on the floor of the passageway. It is adjustable as to height in much the same manner as a barber's chair. Normally this inspector faces in the direction from which the cars are coming, but if he should desire another look he merely twirls his chair and looks through the other window.

Incorporated in the concrete work of the inspection pit between the rails are recesses downgrade and upgrade from the hood, in which floodlights are mounted, two in each recess. The floodlights in each pair are so positioned that the undersides of the cars are fully illuminated.

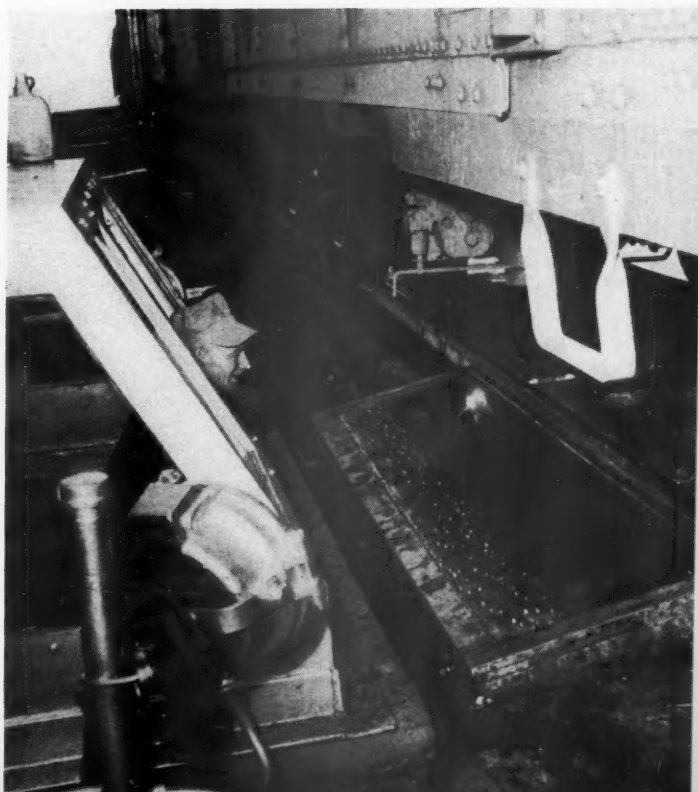
Elevated Stations in Towers

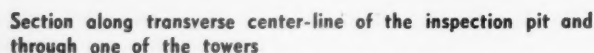
The visible portions of the side inspection pits also consist in each case of a steel-and-glass hood, with shatterproof glass windows on the inclined side facing the tracks and at both ends. On the track side of each of these hoods there are three panels, of which the middle one is so hinged at the top that it can be opened inward and hooked to the ceiling. Between each side pit and the near rail is an inclined mirror, facing upward, by means of which the inspector can detect flaws that would not otherwise be visible. This mirror is 2 ft. wide and 8 ft. long. Two floodlights are placed



Interior of the inspection pit under the track. Swivel seat for inspector permits him to swing around for view in other direction

Inspector stationed at side of track can see undersides of cars reflected in inclined mirror





The enclosed tower on each side of the track is 5 ft. by 16 ft. in plan, the latter dimension being parallel with the track, and is about 20 ft. high. At a height of about 15 ft. above the base of rail is a sliding-sash window opening on the track side of each tower. Inside each tower at a height of 11 ft. is a wood platform, reached by an interior steel ladder, on which the inspector stands. These towers have frames of steel angles with welded joints, and the siding consists of eight-gage flat steel sheets, also with welded joints.

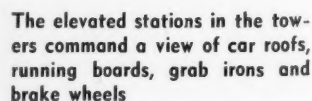
tower, one on each side of the window. These and all the other floodlights mentioned are Pyle-National lights, 10 in. in diameter. All are mounted and directed in pairs and are so focused that they do not interfere with the vision of any of the inspectors. Still another floodlight, a Goodrich Reflecto, is mounted on the upgrade corner of one of the towers. Its purpose is to give illumination for carding bad-order cars. For this reason the light has a flat lens to illuminate a broad area. All the floodlights have 200-watt lamps.

How Information Is Used

When one of the inspectors sees a defect in a passing car he announces the fact to the foreman by means of a system of talk-back loud-speakers. If the foreman decides that the car should be switched to the repair tracks he notifies the retarder yardmaster, who changes the switch list and informs the tower operators accordingly.

A short distance downgrade from the inspection station a device is provided between the rails to warn of any defective equipment hanging below standard clearance. If such equipment should strike this device flashing-light and buzzer signals are set off in the inspection pit beneath the track, warning the inspector to get out of the pit. A buzzer signal is also sounded in the retarder yardmaster's tower.

The inspection facilities at the Pocatello and North Platte yards were designed and constructed under the general supervision of W. C. Perkins, chief engineer of the Union Pacific.



Rail and Tie Purchases Up from Last Year

Railroad buying of miscellaneous materials in the first two months exceeded 1948 by 10 per cent; fuel off 15 per cent; equipment orders down sharply

Purchases of materials, supplies and fuel, excluding equipment, by the Class I railroads during the first two months of 1949 were almost exactly equal to those of the first two months of last year. In 1948, through February, the railroads spent \$345,594,000 in such purchases, while during the same period of the current year their expenditures for similar items are estimated at \$346,009,000. Heavier buying of manufactured items accounted for the fact that purchases attained this level during 1949, because fuel purchases, through February, were about \$22 million or 15 per cent below the same months of 1948. Some easing of the supply situation probably helps to account for the rise in purchases of manufactured products, while the drop in expenditures for fuel is due, no doubt, to a combination of factors, including the traffic decline, a relatively warm winter and the fact that the railroads have had a much larger stock of fuel on hand during the last few months of 1948 and early 1949.

Inventories continued to rise in January, increasing by over \$12 million in that month. This was in spite

of a sizeable decline in fuel inventories and a slight drop in the value of scrap on hand.

Equipment orders during February totaled \$4,395,000, including an estimated \$1,395,000 for 332 freight cars and \$3,000,000 for 30 passenger-train cars. There were no orders for locomotives.

1949 RAILWAY PURCHASES*

	February (000)	Two Month Totals 1949 (000)	Two Month Totals 1948 (000)
Equipment**	\$ 4,395	\$ 11,767	\$128,319
Rail	8,784	16,143	15,900
Crossties	7,117	14,916	10,266
Other Material	93,504	192,874	175,775
Total from Manufacturers	\$113,800	\$235,700	\$330,260
Fuel	57,000	122,076	143,653
Grand Total	\$170,800	\$357,776	\$473,913

* Subject to revision

** Amount placed on order

FEBRUARY* PURCHASES OF MANUFACTURED GOODS (Excl. Equip. & Fuel)

Feb. '49 Compared to Other Febs. (000)			Feb. '49 Compared to Other Months '48 and '49 (000)			Two Month Totals '49 and Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1943	\$57,277	+91	Jan. '48	\$102,136	+ 7	1943	\$115,125	+95
1944	78,632	+39	Mar. '48	117,300	— 7	1944	156,937	+43
1945	74,656	+47	May '48	105,076	+ 4	1945	152,610	+47
1946	60,269	+82	July '48	110,457	— 1	1946	138,124	+62
1947	88,748	+23	Sept. '48	115,892	— 6	1947	185,710	+20
1948	99,905	+10	Nov. '48	117,367	— 7	1948	201,941	+11
1949	109,405		Jan. '49	114,528	— 4	1949	223,933	
			Feb. '49	109,405				

FEBRUARY* PURCHASES OF RAIL

Feb. '49 Compared to Other Febs. (000)			Feb. '49 Compared to Other Months '48 and '49 (000)			Two Month Totals '49 and Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1943	4,340	+ 102	Jan. '48	\$7,547	+16	1943	\$9,151	+ 76
1944	6,264	+ 40	Mar. '48	8,822	—	1944	12,687	+ 27
1945	5,962	+ 47	May '48	6,841	+28	1945	11,696	+ 38
1946	842	+1,043	July '48	7,143	+23	1946	5,931	+272
1947	7,030	+ 25	Sept. '48	9,383	— 6	1947	14,753	+ 9
1948	8,353	+ 5	Nov. '48	10,478	—16	1948	15,900	+ 2
1949	8,784		Jan. '49	7,359	+19	1949	16,143	
			Feb. '49	8,784				

FEBRUARY* PURCHASES OF CROSSTIES

Feb. '49 Compared to Other Febs. (000)			Feb. '49 Compared to Other Months '48 and '49 (000)			Two Month Totals '49 and Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1943	\$4,530	+57	Jan. '48	\$5,630	+26	1943	\$ 8,567	+74
1944	6,675	+ 7	Mar. '48	5,868	+21	1944	13,570	+10
1945	5,459	+30	May '48	6,137	+16	1945	11,060	+35
1946	6,122	+16	July '48	7,621	— 7	1946	11,944	+25
1947	6,930	+ 3	Sept. '48	9,093	—22	1947	14,351	+ 4
1948	4,636	+54	Nov. '48	8,426	—16	1948	10,266	+45
1949	7,117		Jan. '49	7,799	— 9	1949	14,916	
			Feb. '49	7,117				

*Subject to revision

FEBRUARY* PURCHASES OF OTHER MATERIAL

Feb. '49 Compared to Other Febs. (000)			Feb. '49 Compared to Other Months '48 and '49 (000)			Two Month Totals '49 and Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1943	\$48,407	+93	Jan. '48	\$ 88,959	+ 5	1943	\$ 97,407	+98
1944	65,693	+42	Mar. '48	102,610	— 9	1944	130,680	+48
1945	63,245	+48	May '48	92,098	+ 2	1945	129,854	+49
1946	53,305	+75	July '48	95,693	— 2	1946	120,249	+60
1947	74,788	+25	Sept. '48	97,416	— 4	1947	157,606	+22
1948	86,816	+ 8	Nov. '48	98,463	— 5	1948	175,775	+10
1949	93,504		Jan. '49	99,370	— 6	1949	192,874	
			Feb. '49	93,504				

FEBRUARY* PURCHASES OF FUEL

Feb. '49 Compared to Other Febs. (000)			Feb. '49 Compared to Other Months '48 and '49 (000)			Two Month Totals '49 and Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1943	\$41,542	+37	Jan. '48	\$73,468	—22	1943	\$ 81,425	+50
1944	50,041	+14	Mar. '48	68,932	—17	1944	100,382	+22
1945	43,349	+31	May '48	72,968	—22	1945	91,175	+34
1946	49,345	+16	July '48	68,011	—16	1946	100,657	+21
1947	55,651	+ 2	Sept. '48	69,743	—18	1947	115,253	+ 6
1948	70,185	+19	Nov. '48	68,225	—16	1948	143,653	—15
1949	57,000		Jan. '49	65,076	—12	1949	122,076	
			Feb. '49	57,000				

FEBRUARY* TOTAL PURCHASES (Excl. Equip.)

Feb. '49 Compared to Other Febs. (000)			Feb. '49 Compared to Other Months '48 and '49 (000)			Two Month Totals '49 and Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1943	\$ 98,819	+68	Jan. '48	\$175,604	— 5	1943	\$196,550	+76
1944	128,673	+29	Mar. '48	186,232	—11	1944	257,319	+34
1945	118,015	+41	May '48	178,044	— 7	1945	243,785	+42
1946	109,614	+52	July '48	178,468	— 7	1946	238,781	+45
1947	144,399	+16	Sept. '48	185,635	—10	1947	301,963	+15
1948	169,990	— 2	Nov. '48	185,592	—10	1948	345,594	
1949	166,405		Jan. '49	179,604	— 7	1949	346,009	
			Feb. '49	166,405				

FEBRUARY* INVENTORIES OF RAIL

Feb. '49 Compared to Other Febs. (000)			Feb. '49 Compared to Other Months '48 and '49 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
1943	\$19,583	+86	Jan. 1, '48	\$32,924	+11
1944	24,331	+50	Mar. 1, '48	37,341	— 2
1945	25,149	+45	May 1, '48	31,911	+14
1946	22,439	+62	July 1, '48	30,837	+18
1947	31,447	+16	Sept. 1, '48	32,212	+13
1948	36,120	+ 1	Nov. 1, '48	30,916	+17
1949	36,408		Jan. 1, '49	33,243	+10
			Feb. 1, '49	36,408	

FEBRUARY* INVENTORIES OF SCRAP

Feb. '49 Compared to Other Febs. (000)			Feb. '49 Compared to Other Months '48 and '49 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
1943	\$10,408	+80	Jan. 1, '48	\$13,225	+42
1944	9,937	+89	Mar. 1, '48	16,409	+14
1945	10,021	+87	May 1, '48	16,217	+15
1946	11,677	+60	July 1, '48	14,210	+32
1947	11,929	+57	Sept. 1, '48	15,927	+18
1948	13,336	+40	Nov. 1, '48	15,210	+23
1949	18,735		Jan. 1, '49	18,849	— 1
			Feb. 1, '49	18,735	

FEBRUARY* INVENTORIES OF CROSSTIES

Feb. '49 Compared to Other Febs. (000)			Feb. '49 Compared to Other Months '48 and '49 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
1943	\$56,587	+66	Jan. 1, '48	\$92,300	+ 2
1944	72,039	+31	Mar. 1, '48	98,843	— 5
1945	75,259	+25	May 1, '48	92,711	+ 2
1946	75,886	+25	July 1, '48	82,143	+15
1947	88,293	+ 7	Sept. 1, '48	78,309	+20
1948	93,492	+ 1	Nov. 1, '48	79,343	+19
1949	94,164		Jan. 1, '49	94,256	—
			Feb. 1, '49	94,164	

FEBRUARY* INVENTORIES OF FUEL

Feb. '49 Compared to Other Febs. (000)			Feb. '49 Compared to Other Months '48 and '49 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
1943	\$43,654	+110	Jan. 1, '48	\$66,388	+38
1944	49,056	+ 87	Mar. 1, '48	65,071	+41
1945	56,398	+ 63	May 1, '48	62,094	+48
1946	55,613	+ 65	July 1, '48	83,946	+9
1947	51,164	+ 79	Sept. 1, '48	91,850	—
1948	66,727	+ 38	Nov. 1, '48	94,982	— 3
1949	91,831		Jan. 1, '49	96,900	— 5
			Feb. 1, '49	91,831	

FEBRUARY* INVENTORIES OF OTHER MATERIAL

Feb. '49 Compared to Other Febs. (000)			Feb. '49 Compared to Other Months '48 and '49 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
1943	\$374,097	+67	Jan. 1, '48	\$560,703	+12
1944	387,899	+61	Mar. 1, '48	577,078	+ 9
1945	440,353	+42	May 1, '48	603,972	+ 4
1946	439,184	+43	July 1, '48	610,025	+ 3
1947	490,734	+28	Sept. 1, '48	611,861	+ 2
1948	570,201	+10	Nov. 1, '48	615,061	+ 2
1949	626,423		Jan. 1, '49	611,864	+ 2
			Feb. 1, '49	626,423	

FEBRUARY* TOTAL INVENTORIES

Feb. '49 Compared to Other Febs. (000)			Feb. '49 Compared to Other Months '48 and '49 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
1943	\$504,329	+72	Jan. 1, '48	\$765,540	+13
1944	543,262	+60	Mar. 1, '48	794,742	+ 9
1945	607,180	+43	May 1, '48	806,905	+ 8
1946	604,799	+43	July 1, '48	821,161	+ 6
1947	673,567	+29	Sept. 1, '48	830,159	+ 5
1948	779,876	+11	Nov. 1, '48	835,512	+ 4
1949	867,561		Jan. 1, '49	855,112	+ 1
			Feb. 1, '49	867,561	

*Subject to revision

New and Improved Products of the Manufacturers

IMPROVED VISIBLE ACCOUNTING METHOD

Improvements in its car accounting system have been announced by the Transportation Systems Department of Remington Rand, Inc., 315 Fourth ave., New York 10. This system still uses as the basic tool the Kardex visible records, with the new Record Dexigraph doing the work of transcription for per diem reports.

Heretofore, in keeping track of foreign cars, this system used the principle of daily posting to cards the first two or three digits of a car number, the last three digits already showing on typed inserts which had been placed under the visible margin. (When making up per diem reports, total days each foreign car was on line and the amount of per diem earned are posted on slips which also are placed in the visible margin.) Under the old system, clerks merely posted the first two or three digits of the number to the record.

Under the present system, it is the first three (or four) digits which are shown (typed) on the inserts in the visible margin and the last two which are posted by the clerk. (The first three or four digits correspond to classes of equipment held by various foreign roads. This new method of posting makes possible elimination of many sortings, according to the manufacturer.)

Also shown in the visible margin is the range of numbers to be handled on any one card. Thus, under "beginning" number might be 1461 and under "final" no. would be, for example, 00/20. The record for one year of any three cars having common first three or four digits can be posted to one card. The new

method thus makes possible the posting of car records, for any road, in numerical order, so that when the panels are photographed, after per diem days are figured and extensions made, and the report is made to the owning road, that railroad can quickly check its record against per diem reports. Numerical sequences by roads also have the advantage, it is said, of permitting quicker reference to the record of any one car than did the older plan. Another advantage is faster posting, said to be secured through eliminating the necessity for clerks to set up books and make transfer records. Also provided for in this new method is a means whereby short receipts, bad orders and claims may be posted by the use of a Graph-A-Matic signal.

Taking care of the records for home road cars also has been improved. Through the use of summary slips, which are inserted under the visible margin of the Kardex, it is now possible to record with one picture the number of days each car was on each foreign line. (See Fig. 2.)

another as needed. Since this unit plugs in to any standard 110 volt electrical outlet, no special wiring of any kind is needed.

Called the "Record Dexigraph," this



IMPROVED PHOTOCOPY CAMERA

Copying versatility, ease of operation and complete mobility to permit point of use operation are among the advantages claimed for the new high-speed photocopy camera recently announced by the Photo Records Division of Remington Rand, Inc., 315 Fourth ave., New York 10. Mounted on casters, this unit can be rolled from one department to

machine can copy any record up to 9 3/4 in. by 14 in. at original size or at any of five reductions down to 50 per cent of original size. Larger records up to 14 in. by 17 in. can be copied at various smaller sizes. With the average operator, production with this machine is said to be 300 exposures or 150 fully processed copies per hour.

BEGINNING NO.	FINAL DAYS	FINAL DAYS	FINAL DAYS	TYPE
700	0731	12	22	Box
700	33	10		Box
700	43	24		Box
700	79			Box
700	96	31		Box
701	17	6		Box
708	99			Box
709	05	17	10 23	Box
709	39			Box
709	59			Box
709	62	18	67 22	Box
709	86	17	92 21	Box
TOTAL				
Sunt. Car Service				

Fig. 1. Per diem report made up with visible records and Dexigraph

CAR NUMBER	TYPE				
326,000	Box	LN	23	GN	6
326,001	Box	TNO	12	SP	17
326,002	Box				
326,003	Box				
326,004	Box	ATM	28	DAG	3
326,005	Box	SP	31		
326,044	Box				
326,045	Box				
326,046	Box	BC	16		
326,047	Box				
326,048	Box	AC	12	SAL	17
326,049	Box				
TOTAL					

Fig. 2. Record of home-road cars showing days each home-line car was on each foreign line



ELECTRONIC CALCULATING PUNCH

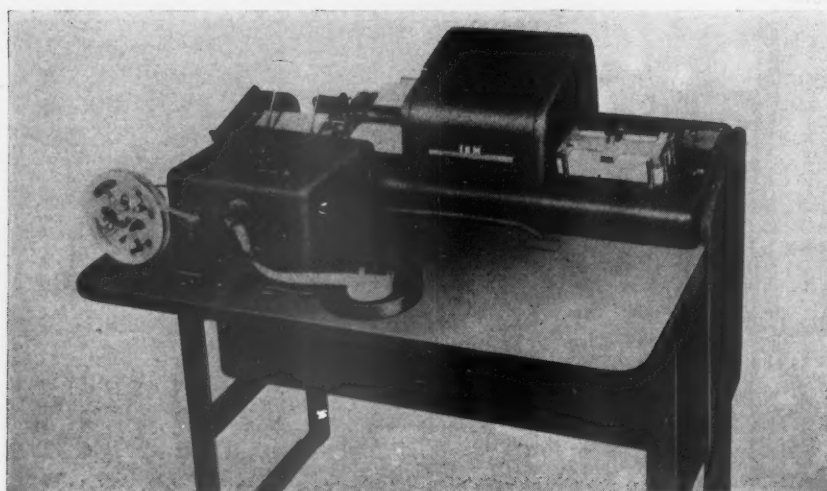
An electronic calculating punch, made by International Business Machines, 590 Madison ave., New York 22, was recently introduced. The machine has basic capacity for an 8-digit multiplicand and a 5-digit multiplier, to obtain a 13-digit product. Calculations involving larger factors are performed by repeated use of the basic capacity in the same run. In division a basic 13 digits may be divided by 8 digits, to obtain a 5-position quotient. Speed of these calculations is reportedly much faster than has been possible heretofore.



PORTABLE BOOKKEEPER

A new portable posting and figuring machine which can be used for problems of addition, subtraction, multiplication and division, in addition to posting of accounts receivable, accounts payable, general ledger, payroll and other records, has been announced recently by Underwood Corporation, 1 Park ave., New York 16. In all work that it does this machine automatically prints a complete record and a proof to permit checking of all figures.

The machine is built for all forms in standard business use. There are 14 distinct automatic operations, including printing of dates and descriptive symbols, tabulation, subtraction, printing of debit and credit balances and paper feed. The operator has only to enter the desired figures and the machine does the rest, regardless of the posting application, the manufacturer states. The keyboard is the ten-key natural sequence type.



TWIN PUNCH MACHINES

International Business Machines Corporation, 590 Madison avenue, New York 22, has introduced two new punch card accounting machines, one a card-controlled tape punch and the other a tape-controlled card punch. With these machines cards may be punched in one location for use as original records for the preparation of reports, for example, while through the medium of a paper tape, a duplicate set of cards may be prepared in an entirely different location. Thus a central office can obtain duplicate records from branches without the latter forwarding the actual cards.

The branch office, using the card-controlled tape punch, prepares the tape for the main office and mails it in. At the central headquarters the tape-controlled card punch is used to interpret the tape and punch the information into cards. It is also possible with the same machines to send the information between two points by commercial wire service, an operation which is performed automatically and at high speed.

AUTOMATIC DISK RESURFACER

SoundScriber Corp., 146 Munson st., New Haven 4, Conn., recently brought out the SoundEraser, described as a completely automatic device which erases the recordings from the plastic Vinylite discs which are used to record along with its SoundScriber dictation machine. Within less than a minute, it is said, it completely removes the impression of a conversation in a bath of heat and infrared rays. The operator merely places the disk on a spindle and presses a button; the machine does the rest. The company states that each disk can be "erased" 25 or more times. The capacity of the machine is reported to be more than 800 disks in an eight-hour day.



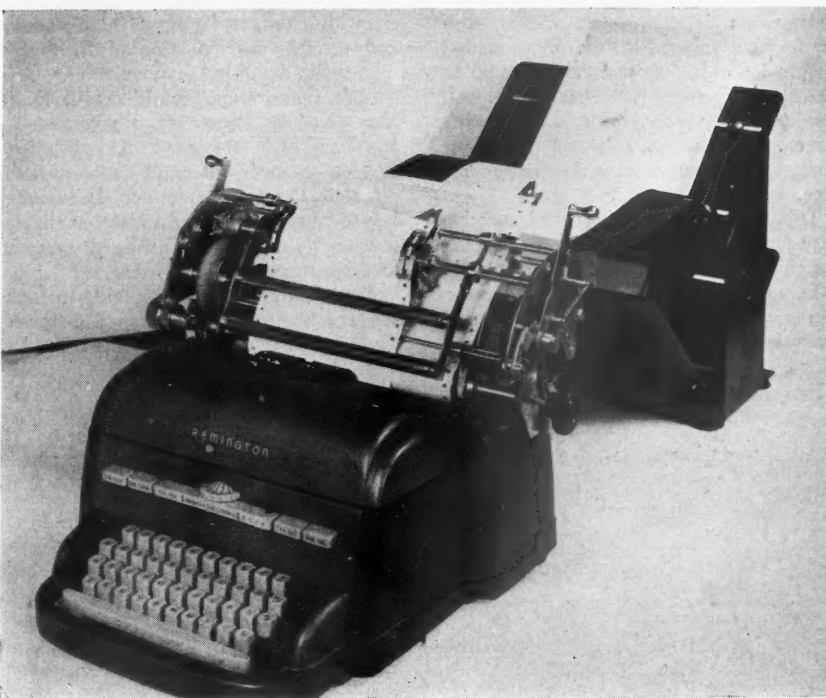
ELECTRIC TYPEWRITER WITH DUAL FEED

A new electric typewriter which can be equipped with dual feed has just been announced by Remington Rand, Inc., 315 Fourth ave., New York 10. This new machine has manifold dial control which is said to permit the operator to make multiple copies with no added effort on his part. The carriage is standard and will handle paper up to 13 in. wide.

All character keys are located in standard fashion on the keyboard while some of the control keys are grouped on a control panel. However, the tabulator, carriage return, shift keys, shift lock and back spacer are on the keyboard.

In order to facilitate cleaning and repair of the machine, an easy way to remove top plate and platen has been provided, so that the operator can perform these operations daily with little trouble, the manufacturer states.

This machine is provided in two models, one fitted with a single pin feed device for continuous operation while the other is equipped with the General Register Company's dual eject feeding device to handle two different sized forms.



PORTABLE TELEVISION FOR INDUSTRY

"Vericon," a three-unit television arrangement, was announced recently by Remington Rand, Inc., 315 Fourth ave., New York 10. Designed for use in industry, this system provides the somewhat

remote observer with the opportunity to see either the person to whom he is talking on an intercommunication system or to observe a demonstration being carried on in some other locality. Activities as far away as 4,000 ft. can be observed by this means.

One of the three units is the camera, which can be operated by anyone, it is



said, following a reading of the instructions.

The second is the pulse power unit, which generates the power necessary to activate the Vericon system. Power supply for this unit is obtained by plugging in any 110 volt, 60 cycle current supply. Third in this array is the master control monitor and viewer, with a 42-sq. in. screen. Master controls for remotely operating the camera are recessed in its face.

This unit, too, is reported to be easy for the average person to operate. A fourth unit, an extension viewer, is available, so that others in different locations can see everything visible to the person operating the master unit.

RECORDAK FILM READER

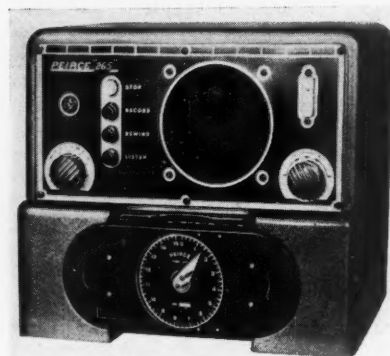
A new motor-driven microfilm reader, with constant focus at three speeds and variable magnification of 24 to 35 diameters, has been announced by Recordak Corporation, subsidiary of Eastman Kodak Company, Rochester 4, N. Y. This "Recordak Transcription Reader" is made for organizations which refer to 16mm. film records frequently, but the manufacturer will make available accessory parts for converting the reader to accommodate 35mm. film.

The three speeds are available in both forward and reverse motions. Top speed of 400 ft. per min. is employed for lo-

cating the general position of an image quickly and for fast rewinding. Slow speeds of one-half foot to 10 feet per minute are for identifying particular documents. These speeds can be adjusted, by a rheostat. A turret top screen (see illustration) can be rotated 360 deg. so that it can be seen from any position.

By means of a prism, controlled by a knob on the front of the cabinet drawer, film images can be turned quickly to an upright position on the screen, regardless of their position on the film. A scanning device centers images on the screen so that the full width of the film can be viewed at maximum magnification.

The lamp house in the reader drawer is cooled by a fan which is said to assure a minimum of heat radiation. A high wattage lamp can be used, increasing illumination on the screen and sharper contrast of images.



One of the three new models of wire recorders, produced recently by the Peirce Wire Recorder Corporation, Evanston, Ill. Voices are recorded on wire cartridges, and a "discriminating" microphone is said to pick up only the voice of the person dictating. Magnetic erasing is used to correct any errors during dictation. The model pictured here is the "Dictater." There is also a transcriber and a machine combining the two

BRUNING WHITEPRINTER

Recently announced by the Charles Bruning Company, Chicago, is the Volumatic Model 93 Whiteprinter, for large volume duplicating work. This machine produces direct positive prints (black lines on white or tinted stocks) directly from original drawings or documents without intermediate steps, at speeds up to 105 sq. ft. per min., the manufacturer states. The process is said to be odorless, so the printer can be operated in plant or office without ventilating ducts.

Built into this machine is a constant voltage transformer which compensates for fluctuations between 190 and 250 volts in public power lines, thus assuring uniform prints at all times.



GENERAL NEWS

Nationalization of Roads Viewed as Real Threat

But U.S.C. of C. speakers also see ways of averting it

Nationalization of railroads in this country is seriously threatened, but it can be averted if prompt and effective action is taken to halt the germination of conditions which will make it inevitable. Fairman R. Dick, of Dick & Merle-Smith, and Sidney L. Miller, professor of transportation at the University of Pittsburgh, said last week at the transportation session held in connection with the annual meeting of the Chamber of Commerce of the United States in Washington, D. C. The remedial action suggested by Mr. Dick called for a more liberal rate policy on the part of the Interstate Commerce Commission, while Mr. Miller, after referring to "the judgment of many thoughtful men" who believe that the railroads "have begun to price themselves out of the transportation market," called for an ending of subsidized competition, a "thorough overhauling" of railway wage procedures, and more freedom for railroads to operate other forms of transport.

Meanwhile, Senator Johnson, Democrat of Colorado, said that the Senate committee on interstate and foreign commerce, of which he is chairman, has the "constant aim" of seeing that the objectives of the national transportation policy are carried out. That, the Senator continued, is the purpose of the transportation investigations being pursued by the committee. Hearings have thus far been held only in connection with the committee's investigation of air transportation; but it has authority also to investigate all other forms of transport.

"Can Congress Cure Transportation Ills?" was the title of Senator Johnson's address, and his general answer to the question was that "Congress cannot, of course, cure all transportation ills, but it can prescribe a little preventive medicine." He also expressed his hope and "sincere belief" that "with the cooperation of shippers, labor and management, the Congress will evolve a way to make our transportation industries effective agencies in the public interest." The addressees of Messrs. Dick and Miller, and another by Andrew H. Brown, transportation commissioner of the Cleveland (Ohio) Chamber of Commerce, were part of a panel discussion of "How Serious is the Threat of Transport Nationalization?" Presiding at the session was the

chairman of the chamber's Transportation and Communication Department Committee—Evans Nash, president of the Yellow Transit Company, Oklahoma City, Okla.

Investor Plays "Most Important" Part

Identifying his role in the proceedings as one calling for a discussion of "the part the investor plays in the survival of private enterprise in transportation," Mr. Dick limited his remarks to "the most important section of transportation—the railroads." He suggested that the investor may play the "most important" part in the "life or death of private enterprise" in the railroads, because the successful functioning of private enterprise "requires a constant flow of new money for modernization." Today, he added, the investor will not supply new money to the railroads, and thus "the battle to preserve our railroads in private ownership and operation is the battle to persuade the investor to furnish the necessary funds."

Mr. Dick finds that investors are "avoiding the railroad industry and choosing other industries" because the railroads "earn only 3½ per cent while other industries earn over twice as much, in many instances three or four times as much." He did not undertake to say precisely what the "earning requirement" of the railroad industry is, but he noted that the Bell telephone system "had to earn approximately 7 per cent" to satisfy the requirements of investors. "And I doubt if the railroads can satisfy them for a lesser amount," Mr. Dick added.

I.C.C. "Hits Target" of 3.6 Per Cent Return

He went on to register his "dissent" from the view that competition is a barrier to doubling railroad earnings through increases in rates. He is "convinced" it is not competition that has "held down railroad earnings to 3.6 per cent for the last quarter century." It is his view that earnings have been on that level "because regulation has enforced rates that produce this return," which has been an I.C.C. "target," hit for 28 years "with an accuracy that surpassed controlled precision artillery fire."

"I can prove this mathematically," Mr. Dick said. "And the most accurate string of four shots in the entire period was in the last four years when the railroads were offered more traffic than they could carry. It might also interest you to know that the commission hit its target of 3.6 per cent with greater accuracy than the Bell system hit its target of 6.42 per cent. I scored the match, and the commission won by a score of 121 to 119. I

repeat, therefore, that the railroads have earned 3.6 per cent because that has been the target of the commission. I assert that they can hit 7 percent if the commission aims at that target. And I further predict that you will not entrust your savings to the railroads until they do hit this target and you are convinced that they will continue to do so."

In suggesting that solution of the railroad problem lies along lines other than the rate-increase approach, Mr. Miller conceded that "a measure of criticism" does lie against the I.C.C. for its "too little and too late" actions of the past; but he went on to commend the commission for its "current realism," as reflected in the prompt handling of recent general rate cases. "And," he continued, "the railway problem must be solved in the present and future, not in the past. . . . I am firmly convinced that, were all regulatory restraints upon rates removed today, net railway operating income could be increased little, if at all; rather, I believe that, with the elimination of restraints, that net might well be reduced materially by the appearance upon a broad scale of cutthroat competition."

Mr. Miller recognized the railroads' problem of meeting increases in costs, and it was in that connection that he suggested an overhauling of wage procedures. He would do this "to the end that all unreasonable burdens be lifted from the shipper, for he 'pays and pays.'" And there is "no question" in his mind "but that equal justice demands that the burden of social security taxes be equalized as among competitors" in the transport field—be it accomplished by lowering the tax on the railroads or raising it on other agencies.

Miller Hits Subsidies

On the matter of subsidized competition, Mr. Miller noted that continuance of subsidies to air lines is defended as aid to an "infant industry," and as necessary because of the "military value" of air transportation. He then asked: "But when does an infant 'grow up'—and what is the comparative military value of air lines, railways, highway operations?" And he proceeded to chide business leaders for their advocacy of government expenditures on waterways. "One of the major mysteries of life," he said, "is how . . . local chambers of commerce can, on the one hand, speak as ardent champions of private enterprise and bitter opponents of 'government in business,' yet, on the other hand, plead for the expenditure of . . . public funds to construct a 'free waterway' for their benefit—even more, advocate the expenditure of millions to

rehabilitate a near-defunct Federal Barge Lines."

As to subsidies to motor transportation, Mr. Miller was aware, as he put it, of the "violent insistence of commercial highway interests" that they "pay their way and more." At the same time, he expressed his own belief that "no impartial student" can study the record and "still accept that assertion."

Summing up on the subsidy matter, he suggested it could be said with truth that "private enterprise in the field of transport cannot endure, a subsidy given to one portion but denied to another." And that proposition raised in his mind these questions: "Shall we subsidize the entire field—and, do we, how strong is the argument to continue a system of private ownership and operation? Or, again, is it too logical, too reasonable, to withdraw the subsidy from all—to ask that those who use facilities provided at public cost shall make an adequate payment for such use?"

In arguing that the railroads should have greater freedom to operate in other fields of transport, Mr. Miller had in mind liberalization of the Panama Canal Act which "bars almost wholly railway ownership of boat lines"; the provision of the Interstate Commerce Act which "hampers seriously the integration of rail and highway operations under common ownership"; and the Civil Aeronautics Board's policy, "without basis in statute," which is "an absolute barrier against control of any air operations by a surface carrier." Mr. Miller explained that he was "no advocate of extensive integration under single ownership," but he favors "most emphatically the removal of all barriers to integration when such integration has been clearly shown to be in the public interest." To him, the "public interest is of vastly greater significance than protection of particular corporate entities in the fields of highway, water, air," and he is "convinced that the railroads, for example, could utilize the motor truck to public advantage in ways not now permitted, both to improve service and reduce costs."

Reparations Would Be "Major Disaster"

Meanwhile, Mr. Miller had warned that nationalization of the railroads might result from some "major financial disaster" of the kind which "impends" in the so-called reparations complaints whereby the government is seeking large awards on the basis of allegations that it was overcharged by the railroads on its shipments of various commodities during World War II. The amounts claimed by the government "will exceed \$2 billion and may total \$3 billion," Mr. Miller said, adding that if the government should win the cases, the railroads "would stand face to face with disaster."

It was Mr. Miller's general finding, as stated at the outset of his address, that, if nationalization comes, "we will not have chosen it; rather, we will have blundered into a position that makes na-

tionalization inescapable." He also expressed his view that any program of nationalization will not stop with the railroads, but "is quite certain to sweep the entire field."

Senator Johnson opened his address with an appraisal of the general economic situation, which he found one in which "most products and services have priced themselves out of the market," and "disaster" is "only being delayed" by the country's expenditures under the Marshall Plan and the national defense program. The senator found this situation related to the transportation industry because he said that industry, being a service industry, would be among "the first to feel the pinch and bear the fruits

John Barbuto Rides Again— On \$250,000 Lobby Kitty

John Barbuto, Trenton, N. J.'s, intrepid truck operator, who, as reported in the *Railway Age* of April 9, recently won the distinction of carrying the largest truck overload ever recorded in Pennsylvania—132,000 lb. on a truck registered for 45,000—is at it again. But John is obviously slipping. This time, according to the *Harrisburg, Pa., Evening News*, he only had 85,000 lb. on his little 45,000-lb. truck. And what's more, he got nicked for two fines, totaling \$80, at North Huntingdon, the second one for attempting to resume his trip after disobeying police orders to unload his excess weight.

Moreover, John better look to his laurels. He has rivals—James Krony, of McKees Rocks, who was toting 88,240 lb. of steel on one truck, and Earl Miller, of Nottingham, who was found to be carrying 92,560 lb.

The Pennsylvania Motor Truck Association is reported to have declined comment on these violations of the state's truck weight law, but the April 25 issue of *Transport Topics*, official weekly publication of American Trucking Associations, reported the formation of the "Pennsylvania Motor Truck Educational League," with a \$250,000 budget, "to ascertain the views on highway transport progress of all candidates for public office and to spearhead opposition to those who would hamper or obstruct the proper use of the state's highways." W. W. Ward, of Altoona, and James P. Clarke, of Philadelphia, were listed as co-chairman of the league.

The same issue of *Transport Topics*, commenting editorially on the league's formation, says bluntly: "The first move will be to ascertain the highway transport views held by all candidates for public office and to spearhead opposition to those who would obstruct proper use of highways. Legislators and prospective office-holders understand such action. They know it means votes for or against them."

When the railroads try to present their views on such matters, *Transport Topics* calls it "lobbying."

of economic disturbance." He then noted the importance of transportation to the economic life of the nation, and referred briefly, to the development of federal regulatory policy in the transport field. Next came his assurance that the Senate committee which he heads is determined to do what it can to see that the declared national policy is carried out.

Committee Wants to Be Helpful

In the investigations which it has launched, the committee will not "indulge in witch hunts," or "make a nuisance of itself," Senator Johnson said. "We are," he added, "going about these vital investigations with the solid objective ever before us of being constructively helpful. But we are very serious and will not tolerate obstruction of any kind; if we find evil, we will expose it."

Referring specifically to the investigation of air transportation, which is already under way, the senator said that the Bureau of the Budget had calculated that "the out-of-pocket contribution American taxpayers are currently making annually to civil aviation is \$300 million." He went on to point out that this "sizable sum" goes to an industry with a total capitalization of "but \$700 million," which is "insisting upon more generous subsidies." The committee "is determined to find out what justification there may be for these urgent demands."

The senator also referred to the Maritime Commission's recent grant of \$42 million toward the construction of a \$70-million "super-liner," and to the fact that Colonel J. Monroe Johnson, director of the Office of Defense Transportation, has been "pleading about the precarious shortage of freight cars from a national defense standpoint." A railroad executive, so the senator said, recently asked him if it would not seem fair to exclude from taxable income the excess cost, above depreciation, of new units of railroad equipment. "Can anyone," the senator continued, "tell me why not when we spend billions of tax dollars on airports, highways, and barge lines?"

Turning again to the expenditures on the defense program, Senator Johnson expressed his opposition to the present level of such outlays. "However," he continued, "if only half our defense program is warranted, how dare we neglect transportation?" He paid tribute to the performance of transportation industry in World War II, and expressed his view that "at least 50 per cent of the money we spend on our military machine should go for transportation."

Because the transportation industry is one of those with "vital defense aspects," Congress cannot "sit idly by" and permit it to "disintegrate," the senator said. At the same time, he added, the solution of current transportation problems "is not the responsibility of Congress alone, and Congress must be wise enough to realize it." Thus it is his view that private management "must be given a full opportunity to bring forth the answers"; that Congress and the regulatory agencies

"must guide and assist, not direct and hinder."

"Intelligent Self-Interest" of Shippers

Transportation Commissioner Brown of the Cleveland Chamber of Commerce finds the threat of transport nationalization "very serious indeed," but he expressed his belief it can be held off if the four groups which have a "duty to do something" proceed in accordance with the national interest. The groups Mr. Brown had in mind are the regulatory agencies, Congress, the carriers, and the shippers.

He suggested that the regulatory agencies "observe the limits of the powers granted them by Congress," and spend less time "in mapping new areas for the exercise of regulatory powers." As for Congress, Mr. Brown said it "should view every effort toward strengthening the power or broadening the jurisdiction of any governmental agency with an extremely jaundiced eye"; and that it "should regularly survey the results" of the regulatory laws it enacts.

As to the carriers, "the most important element is that of attitude," Mr. Brown said. "We face a curious paradox," he continued. "On the one hand carrier management complains bitterly that it is restricted to the point of impotency and on the other it rushes to the boards or commissions with its troubles." Meanwhile, the shippers, as Mr. Brown put it, "must come to the realization that they have a direct stake in the successful maintenance of private competitive operation of our transportation agencies." He explained that "by this I do not mean that they should take the position which we have all heard called 'statesmanlike'—that is to say that they must agree with the carriers whenever they seek increases in rates." What he meant was that shippers "should not at once froth at the mouth when increases are proposed"; they "must study each situation and base their conclusion on what is fair and just, which is another way of saying they should follow the trend of intelligent self-interest."

Eastern Roads Defend Proposed Rate Pact

Urge I.C.C. to approve Bulwinkle-Act agreement

Hearings in connection with the Interstate Commerce Commission's consideration of the rate-procedures agreement proposed for commission approval by eastern railroads got under way in Washington, D. C., on May 11 before Commissioner Rogers and Examiner Burton Fuller. The proceeding is docketed as Section 5a Application No. 3, the proposed agreement having been filed under that section of the Interstate Commerce

Act which was added last year by the Bulwinkle-Reed Act.

In addition to those of interested railroads, appearances entered include those of the Department of Justice, the National Industrial Traffic League, and the American Short Line Railroad Association. The latter two are supporting interveners while the Justice Department is opposed to commission approval of the pact. The department did not indicate at the opening session of the hearing whether it would follow in this case the course it adopted at the recent hearing on the agreement proposed by carrier members of the Western Traffic Association. There its attorneys neither cross-examined railroad witnesses nor introduced any evidence of their own (see *Railway Age* of April 16, page 79).

When a copy of the eastern application and proposed agreement was offered as an exhibit at the present hearing's opening session, the Justice Department attorneys registered their objection to the consideration as evidence of what they called "self-serving" material in the application. Commissioner Rogers stated that the exhibit would be received and marked for identification, and that a ruling on its admissibility as evidence would be deferred until after the cross-examination was completed.

The first railroad witness in support of the agreement was John J. Fitzpatrick, chairman of the Traffic Executive Association—Eastern Territory. He made a comprehensive statement, explaining and defending the proposed agreement and its specific provisions. The "basic purpose" of the pact, he said, is to enable the carrier parties thereto "to establish and maintain traffic matters in compliance with law and in furtherance of the national transportation policy." The proposed organization and procedures, he explained, "are the same in principle" as those which have been in effect for years; but they have been modified in the agreement "in the interest of uniformity and with a view to simplifying and streamlining to the utmost."

Dealing with those provisions of the agreement which are designed to accord individual carriers the right to take independent action, Mr. Fitzpatrick replied at some length to the Justice Department's contention that "free and unrestrained right to take independent action" is not accorded by such provisions. He called such a contention "contrary to the plain text of the agreement," and one which comes down to a claim that "clear language is without meaning." He also cited instances of independent actions taken by railroads in the past "under this language of the agreement."

Mr. Fitzpatrick was followed in turn by H. W. Von Willer, vice-president of the Erie, and Fred Carpi, vice-president of the Pennsylvania; and several other traffic executives were scheduled to testify at subsequent sessions of the hearing. Summing up his presentation, Mr. Von Willer said that the interests of both carriers and shippers "are best served

through the medium of rate committees," because rate conferences are "the connecting link between our transportation system and its users."

"The termination of the work and functions of the committees provided for by the present agreement would inevitably result in chaotic conditions," Mr. Von Willer also said. "We would, as a practical matter, be denied access to the basic facts which we must have if we are to comply with our legal duty to establish and maintain rates which are reasonable and free from discrimination. Our shippers would be cut off from the protection which the present machinery affords to them and would be subjected to discrimination and prejudice. The stability of the railroad industry would be threatened contrary to the public interest."

Mr. Carpi, in his summation, said that a full appreciation of the advantages of the conference method of rate construction could be had only in conjunction with an understanding of the "ramifications of free enterprise in this country." He had in mind the fact that the nation is a "vast" one, with "tremendous natural resources" and an "enormous capacity for consumption of all types of goods."

"To meet the necessities of this vast, varied and widespread flow of commerce," he continued, "it is important that the railroads be in a position to provide proper freight rates promptly. In doing so they have both the legal and moral obligation to consider the rights of all concerned. The railroads could not possibly respond fully and promptly to these obligations without the conference procedure which has been developed by the process of trial and error. It is unrealistic to believe that the necessities of commerce could be fully and satisfactorily met by dealing with our patrons at arm's length, which would result if the conference procedure was abolished and the shippers had to file formal complaints with the Interstate Commerce Commission to obtain needed rate adjustments."

Taxes Gave U. S. Big Freight Rate Discount

Report on R.F.C. reparations claim shows 71 per cent offset

How railroad payments of income and excess-profits taxes returned to the federal government a substantial part of the money it paid in freight charges during World War II has been pointed out by Examiner Howard Hosmer of the Interstate Commerce Commission's staff. Mr. Hosmer discussed the matter in a proposed report in which he recommended that the commission dismiss a complaint wherein the Reconstruction Finance Corporation is seeking repara-

tions totaling approximately \$148,279 on the basis of allegations that the rates it paid on shipments of tin ore and concentrates from New York and other eastern points to Texas City, Tex., were "unjust and unreasonable."

The examiner's comment on the income and excess-profits tax phase, which he called "somewhat novel," aroused considerable interest because the same issue has been raised with respect to the so-called reparations cases—the 17 pending complaints whereby the government is seeking recovery of amounts, the total of which has been estimated at from \$2 billion to \$3 billion. While Mr. Hosmer would have the commission find that the rates assailed by the R.F.C. were just and reasonable as measured by standards in the Interstate Commerce Act, he went into the tax matter to point out that there could be no full recoupment by the railroads. "Any amount recovered from defendants as reparations," he explained, "would affect the amount of their net income for tax purposes in the year of payment, but in all probability the resulting tax saving would be far less than the taxes paid during the reparations period."

Taxes Paid on Claimed Money

Evidence submitted in the case by the railroads included calculations of the income and excess-profits taxes paid on the amount of reparations claimed with respect to 10 of the 771 carload shipments involved in the complaint. The calculations showed that the reparations claimed totaled \$1,867.30, and that the income and excess profits taxes paid on that amount of revenue at the time of the shipments amounted to \$1,327.49, or 71.1 per cent. The railroads, as Mr. Hosmer summarized their position, argued "that they would be equitably entitled to a set-off of this amount against any award of reparations on the 10 carloads." The examiner agreed, calling the argument "in accord with simple principles of justice."

"In the instant case," he continued, "it is impossible to see how in good conscience the government could defend its retention of taxes heretofore levied by it on revenue which it now asks to be restored to it as an aggrieved shipper, except perhaps on some punitive theory which would be unjustifiable upon the facts shown here."

The proceeding is docketed as No. 29945, and the shipments involved in the complaint moved to the tin smelter built at Texas City in 1940 by the Metal Reserve Company, which was a subsidiary of the R.F.C. The location of the plant contemplated that it would be served principally by water transportation, but "exigencies due to the war" shifted the business to rail routes out of New York, Glen Cove (Long Island), N. Y., Philadelphia, Pa., Baltimore, Md., and Norfolk, Va.

This was early in 1942, and the railroads published a commodity rate of

\$1.09 per 100 lb. from New York to Texas City. In the absence of this, the applicable class rate would have been \$1.78 per 100 lb. The \$1.09 rate was also published from Philadelphia, while \$1.05 was published from Baltimore and Norfolk, and \$1.12 from Glen Cove. The 771 shipments moved during the period between January 22, 1943, and December 10, 1946, and 752 of them moved from New York.

Basis of R. F. C. Contention

The \$1.09 rate from New York was made up of a basic rate of \$1.03, plus the Ex Parte 148 increase of 6 per cent. The latter was not removed when the Ex Parte 148 increases generally were suspended in May, 1943, by order of the commission, the carriers there relying on that provision of the suspension order which exempted rates that had been reduced "below reasonable levels as a real concession to the government."

The R.F.C.'s claims are based on a contention that the rate from New York should have been 90 cents subject to an Ex Parte 148 increase of 5 cents "in the periods when the latter was in effect." This figure, Mr. Hosmer explained, "approximates what complainant regards as the rate applicable to a shipment of tin concentrates from Texas City to New York—if such there had ever been—namely 89.3 cents." Such a rate would have been composed of the aggregate of intermediate rates to and from Cincinnati, Ohio.

In recommending that the commission dismiss the complaint, the examiner noted, among other things, that the assailed rates represented only 2.67 per cent of the value of the tin ore at destination. He went on to say that the corresponding percentage for all traffic in 1946 was 5.46 per cent; and for products of mines as a whole it was 23.13 per cent. Comparisons made by the R.F.C. with other rates "fall short of proving that the assailed rates were too high," Mr. Hosmer also found. He calculated that the average revenue per car-mile under the assailed rates was 50 cents, while the average per ton-mile was 10.2 mills.

Board Makes Report In R. E. A. Wage Case

Recommends 40-hour week and raise of 7 cents

Settlement of the Railway Express agency's 40-hour-week and wage case on the basis of the railroads' recent agreement with their non-operating employees has been recommended by the emergency board which President Truman appointed to investigate the dispute. Thus the R.E.A. employees, who are repre-

sented by the Brotherhood of Railway Clerks, would get a 40-hour week effective September 1, and a 7-cents-per-hour wage increase retroactive to October 1, 1948; and their requests for an additional wage increase, an earlier effective date for the 40-hour week in New York, more liberal paid vacation arrangements, and other rules changes would be denied.

The report was submitted to President Truman on May 6 by members of the board, who are Chairman David L. Cole of Paterson, N. J., Aaron Horvitz of New York, and Leverett Edwards of Oklahoma City. The board was created by the President on April 9, about a month after the dispute had brought "slow-downs" and "sit-down strikes" to R.E.A.'s New York terminals. The board's report referred to these maneuvers only as "a situation," adding that the outcome was that on March 8 the Express Agency "abolished all jobs in New York, declared an embargo and shut down its local operations there." This continued until April 14, when the board "succeeded after two days of mediation in persuading the parties to enter into an agreement under which work was resumed on April 18."

The 40-hour week recommended in the report would involve maintenance of the present 44-hour basis of pay, and would thus bring another increase of 10 per cent in hourly rates. Because the non-operating railroad employees now have a 48-hour week, the conversion in their case will increase their hourly rates 20 per cent in addition to the 7-cent increase. The brotherhood had urged that conversion in the case of the R.E.A. employees be accomplished by adding another hourly increase of 7½ cents (which would be in addition to the 7 cents) to the 10 per cent to compensate them "for a disparity in the increases enjoyed by the railroad employees over the express people since 1940, arising out of the fact that in the express industry the 44-hour week has been in effect since that year."

The board rejected that contention because it "clearly goes beyond" the non-operating agreement and is "contrary to the theory that when a work week is shortened prior earnings should be preserved". The report added that "recapture of amounts necessary to reestablish relative earnings positions of former years does not seem to the board to be appropriate in this proceeding."

Vacation Proposals Rejected

The demand for more liberal vacation arrangements was rejected on similar grounds, i.e., it was not considered by the board to be "in line with the main purpose of this proceeding," which is "to have the changes in working conditions of the express employees conform to those made in the railroad industry." The demand was for paid vacations of 8 working days after 1 year of service, 10 days after 2 years, and 15 days after 3 years. Present arrangements call for 1 week after a year of service and 2 weeks after 5 years.

The brotherhood's demand for an

earlier effective date for the 40-hour week in New York was based on the fact that R.E.A. vehicle employees there, who are represented by the International Brotherhood of Teamsters, have had a 40-hour week since March, 1948. All other employees in New York, as the board put it, "have been resentful because of the discrimination." It summarized R.E.A.'s position on the matter as one "contending that if an earlier effective date is used in New York the reactions and disturbances in other places will be serious, and that to discriminate in favor of New York would amount to rewarding New York employees for their breach of the agreement in March when the company alleges it was compelled to discontinue operations in New York for a period of some five weeks." Also noted was the recent agreement between R.E.A. and the teamsters' union, under which that union's members outside New York will not get the 40-hour week until September 1.

In summing up on this matter, the board called the problem presented a "perplexing one." But, "on balancing all the factors," it concluded that "it would be unwise to deviate from the pattern of the Chicago [non-operating employee] agreement and from the established national pattern always followed in the past for the sake of gaining [at New York] at most two months' advantage over all other express and railway non-operating employees."

Earlier in its report, the board had laid the basis for its adherence to the "non-op" pattern. It said that R.E.A. "is generally regarded as the express department of the railroad industry," and that the practice of treating R.E.A. employees as non-operating railway employees is "firmly entrenched." Thus the report's recommendations as to rules revisions necessary to implement the 40-hour week called for the incorporation into R.E.A.-B. of R.C. agreements of various provisions of the "non-op" agreement.

"Substantial" Cost Involved

The board conceded that the 40-hour week could not be installed by R.E.A. without "substantial" cost. "The board is aware, however," the report added, "that the agency is in financial effect a joint facility or arm of the railroad industry and that there are other branches of the industry which, standing alone, are also unprofitable." Earlier it had said that the transition "unfortunately is being made at a time when the Agency's volume of business is sharply declining and if it were not for the traditional and direct tie-up with the railroad industry some softening devices might be sought." At the same time, this declining-revenue situation was also a factor in the board's decision to reject demands going beyond the proceeding's "major purpose" to establish "the railroad type of 40-hour week in the express industry."

As for the adjustment of hours of monthly-rate R.E.A. positions in train



The Pennsylvania has announced the purchase of 10 additional rotating reservation boards from the Wassell Organization, Inc., of Westport, Conn., for installation in Pennsylvania Station, New York. The devices, known as "Wassell units" after their inventor, F. Lloyd Wassell, will be of an improved type similar to the one (above), which has been in experimental service at the station since the first of the year. Their installation, with special telephone equipment, is expected to cost about \$90,000. Instant visualization of accommodations available on 54 passenger cars for 90 days ahead can be provided on each of the new nine-cylinder machines, compared with a capacity of 45 cars for 90 days on the earlier three-cylinder reservation boards. The new units occupy a floor space 8 ft. in diameter, compared with the 11½ ft. needed for the earlier units and require only 7 instead of 8 distribution clerks apiece when operating at full capacity. The 10 new sets of "Wassell units" will supplement the two now in use at Pennsylvania Station, one of these being of the new type and one of the older

service and over-the-road truck service, the board recommended that the work month be fixed at 170 hours, with overtime at pro-rata rates for work above 170 hours up to 190 hours and time and one-half for all hours worked above 190. Employees in these positions now have a work month of 190 hours with pro-rata overtime thereafter up to 204 hours and then time and one-half.

Another matter dealt with in the report was the rule covering so-called short-hour employees. These are hired for peak-load periods, but their number averaged only 872 for the country as a whole in 1948. The brotherhood is seeking to cancel the rule so that such employees will come under the general day's-pay guarantee rule. The board calculated that only 1.3 per cent of R.E.A.'s 1948 employees were in the short-hour group. It favored the union proposal, setting out its view as follows: "In the process of regularizing the hours of employment in the express industry it seems appropriate under all the circumstances to give favorable consideration to the request of the organization that this trifling group of employees be placed on the same basic day as that which the other 99 per cent have. It will create a burden of very little consequence to the Agency."

"Toss Out Horse-and-Buggy Statutes," Urges Barriger

The time has come when the "archaic" Interstate Commerce Act should be revamped so that railroad freight rates can be made more flexible, and, if necessary, be reduced to attract more traffic. John W. Barriger, president of the Chicago, Indianapolis & Louisville, declared in an interview published in the Boston (Mass.) Post on April 26. The article quoted the Monon president as saying that the rail carriers could do a much better job for the people of the United States if the present cumbersome rate procedures, which are a throwback to "horse-and-buggy" days in railroading, could be "tossed out the window."

Mr. Barriger pointed out that, before the era of regulation, the roads handled anything they could get that would produce an operating profit. The railroads today should be granted similar freedom to set up rate structures designed to "attract business and not to repel it," he added. "Too many rates in rail tariff schedules seem to be there for the purpose of making freight move by their competitors."

He told the Boston Post that "if the railroads were permitted to have flexible procedures which recognized the present

commercial 'facts of life' in merchandising transportation, there is no freight that now moves more than 150 mi. by truck that the railroads could not afford to carry and would not carry." He emphasized that no criticism of the commission, per se, was implied, but asserted that the regulatory body has no alternative but to carry out laws reflecting the thinking of the "gay nineties" when the railroads were real monopolies.

The newspaper article continued, in part: "Citing the fact that industry-owned truck lines . . . and contract carriers have been diverting a sizeable share of freight from the rail carriers, Mr. Barriger commented that 'a law originally made to protect the public now principally serves to protect railway competitors against railway competition. The I. C. C. Act has become an umbrella to shield competing transportation agencies and give them a field day.'"

When asked whether he thought a re-vamping of the transportation law would have the effect of cutting railroad freight rates, the Monon chief replied: "The end-product of the combination of the factors I have discussed keeps traffic off the American railroads. This increases were not hampered in their ability to their unit cost of doing business. If they compete with trucks and waterways for traffic, the railroads would obtain a much larger volume of business. This would enable them to operate more efficiently. Improved earning power would then be obtainable with lower rate levels than are possible under present conditions."

Manchester, N. H., Stages Historic Locomotive Exhibit

Locomotive-building in Manchester is the subject of a current exhibit at the Manchester, N. H., Historic Association. Early lithographs, photographs, designers' original drawings, and other railroad material illustrate the story of Manchester's two concerns that made locomotives for more than 50 years and produced over 2,000 for railroads all over America in the 19th century.

The exhibit, open free every afternoon except Monday, will continue through September.

B. & O. Introduces New "Columbian"

The Baltimore & Ohio on May 5 introduced its new "Columbian," as the "first strata-dome train built for any eastern railroad." Scheduled for daily operation in each direction between Washington, D. C., and Chicago, trains bearing the "Columbian" name were christened on the 5th in those two cities.

Miss Drucie Snyder, daughter of John W. Snyder, secretary of the treasury, was sponsor for the Washington train at Union Station, while Miss Barbara Cunningham, daughter of James D. Cunningham, B.&O. director, was sponsor of the Chicago train at Grand Central Station



The Baltimore & Ohio's new "Columbians" will begin service at regular coach fares between Washington and Chicago on May 15



The "Columbian's" strata-domes, available to all passengers at no extra charge, are equipped with a speedometer, an altimeter, a barometer and a clock

in that City. At both ceremonies a bottle of water from the Potomac river and Lake Michigan was broken over the rear end of the train.

The Washington ceremonies also included the release of several hundred pigeons, lent by racing pigeon fanciers at 12 points along the route of the train. The pigeons carried messages from B.&O. President R. B. White to the mayors of their respective communities. The messages advised each mayor that one of the cars on the new train had been named after his city.

President White presided at the Washington ceremonies, and noted in a brief address that the original "Columbian," in 1931, was the "first air-conditioned train in the world." In planning for the new "Columbian," Mr. White continued, he and his associates "have had very much in mind such pioneering achievements of the Baltimore & Ohio in passenger service." The B.&O.'s vice-president and executive representative in Chicago, G. Murray Campbell, presided at the ceremonies in that city.

Each of the new trains consists of 8 cars and a two-unit Diesel-electric locomotive. The cars were built by the Pullman-Standard Car Manufacturing

Company; and the locomotives, purchased several months ago, were built by the Electro-Motive Division of the General Motors Corporation. Exclusive of the locomotives, each train represents an investment of \$1,000,000, the B.&O. said.

The 8 cars of each train include the strata-dome car with a 24-seat observation section; an observation-lounge car with a cocktail bar; a diner with diagonal seating arrangements; a coffee shop-lounge car with tables and a snack bar, and 4 coaches fitted with "Sleepy Hollow" reclining seats. Apart from the strata-dome and interior color scheme, the train has many other new features. It is equipped with an electrical robot which automatically controls the pressure of the air brakes, thus insuring a smooth stop, once the engineer sets the control. It is also equipped with roller bearings, shock absorbers, and tight-lock couplers, and has fluorescent illumination throughout. All cars are air-conditioned, and each is equipped for radio reception.

The radio system is linked with a public address hook-up to permit announcements from the conductor's desk, the dining car steward's desk or from the room of the stewardess-nurse in the observation-lounge. In addition, the

speakers can be used to relay music from wire recordings. There is an inter-communication system for the train crew, consisting of dial telephone stations in the locomotive cab, the baggage room, the conductor's desk, and the observation car.

The train's westbound schedule calls for departure from Washington at 4:40 p.m., Eastern Standard Time, and arrival at Chicago at 7:20 a.m., Central Standard Time, the following morning. The daily departure from Chicago is at 3:50 p.m., Central Time, and the arrival in Washington at 8:25 a.m., Eastern Time, the following morning.

Long Island Suspends Improvement Program

Since assumption of control of the Long Island by trustees appointed by the federal court the road has been able to earn only enough to meet its payroll, amounting to about \$2,000,000 monthly; pay current bills for material and supplies, and remit to connecting lines their proportion of the freight charges collected by the Long Island for shipments moving over more than one line, it was disclosed in a statement by David E. Smucker and Hunter L. Delatour, trustees. Payment of interest on indebtedness and payment of real estate taxes, both extremely heavy items of expense, have had to be deferred, the statement said, adding that "In order to continue operations at the former level and to meet payroll and material bills, it has been necessary to suspend almost all of the \$18,509,000 improvement program which was begun in the fall of 1947."

"Up to March 2, 1949, when the decision of the Pennsylvania to discontinue subsidizing its ever-mounting deficits left the Long Island no alternative but bankruptcy," the statement continued, "74.6 per cent of the work contemplated in the improvement program had been accomplished at a total expenditure of \$13,166,564. . . The trustees are not contemplating any drastic curtailments in passenger service for the present and, as a matter of fact, are planning to establish a few additional trains in territory where very rapid residential development has resulted in a necessity for this. . . . They may later be forced to reduce train service on certain lines, but this will not be done unless its necessity is definitely indicated."

Freight Car Loadings

Loadings of revenue freight in the week ended May 7 totaled 768,337 cars, the Association of American Railroads announced on May 12. This was a decrease of 17,107 cars, or 2.2 per cent, under the preceding week, a decline of 111,950 cars, or 12.7 per cent, under the corresponding week last year, and a drop of 115,905 cars, or 13.1 per cent, under the equivalent 1947 week.

Loadings of revenue freight for the week ended April 30 totaled 785,444

cars, and the summary for that week as compiled by the Car Service Division, A.A.R., follows:

	Revenue For the week	Freight ended	Car Loadings Saturday, April 30
District	1949	1948	1947
Eastern	143,947	160,888	165,099
Allegheny	170,921	183,375	189,345
Pocahontas	66,005	77,766	72,709
Southern	118,422	145,000	137,144
Northwestern	119,198	129,881	127,154
Central Western ..	111,376	125,215	127,026
Southwestern	55,575	68,990	64,097
Total Western Districts	286,149	324,086	318,277
Total All Roads..	785,444	891,115	882,574
Commodities:			
Grain and grain products	45,010	38,723	43,951
Livestock	10,963	14,748	15,479
Coal	161,166	204,454	178,672
Coke	14,354	13,403	14,650
Forest products..	38,291	44,726	47,267
Ore	71,621	79,037	65,884
Merchandise l.c.l.	93,681	111,454	124,149
Miscellaneous ..	350,358	384,570	392,522
April 30	785,444	891,115	882,574
April 23	769,336	851,926	893,712
April 16	765,890	784,611	865,844
April 9	757,784	682,934	757,839
April 2	725,623	660,631	715,159

Cumulative total 17 weeks

In Canada.—Carloadings for the week ended April 30 totaled 74,119 cars, as compared with 73,840 cars for the previous week, and 74,354 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
April 30, 1949	74,119	31,615
May 1, 1948	74,354	34,655
Cumulative totals for Canada:		
April 30, 1949	1,228,928	540,972
May 1, 1948	1,251,412	616,900

Trainmen Join Fight Against Government Reparation Claims

The Brotherhood of Railroad Trainmen has made unanimous the opposition of railroad labor organizations to the federal government's claims for reparations on its shipments of various commodities during World War II. On May 5, that union filed with the Interstate Commerce Commission a petition for leave to intervene in the 17 pending proceedings which embrace the government's complaints. Like petitions had previously been filed by the Brotherhood of Locomotive Engineers and the Railway Labor Executives' Association.

The B. of R. T. petition said that an award of the "substantial reparations" sought by the government would "seriously disturb the economy of the nation and of the railroads." It added that such an award would "consume railroad funds that could otherwise be used for the employment of labor, the general improvement of working conditions, the purchase of materials and supplies, the installation of safety devices, the improvement of roadbed, track and equipment, and the furtherance of the general welfare of the railroad industry and the men who work for it."

"The railroads," the petition also said,

"always try to recoup financial losses by reduction of forces and increases in rates. Neither one would solve the predicament that would result from large reparation awards. Increases in rates would drive business to competing forms of transportation, and reduction of forces would contribute to the economic chaos, resulting in a serious decline in railroad revenue."

Belt Conveyor Plan Defeated In Ohio Legislature

Further legislative consideration of Ohio house bill No. 628, which would have accorded public utility status, including the right of eminent domain, to the proposed coal and ore belt conveyor from Lorain, Ohio, to a point on the Ohio river near East Liverpool, was indefinitely postponed on May 3 by the house committee on commerce and transportation. The action, taken by a committee vote of 12 to 4, virtually kills the bill, at least for this session, although a similar bill, senate No. 150, was still pending before the judiciary committee of the Ohio senate as this issue of *Railway Age* went to press.

The conveyor plan, sponsored by H. B. Stewart, Jr., president of the Akron, Canton & Youngstown, was fully described in *Railway Age* of February 12, page 42. It has been opposed by other railroads and by railroad brotherhoods.

Emergency Board Reports On Southern Pacific Case

The White House on May 7 made public the report of an emergency board which President Truman created on March 30 to investigate a dispute between the Southern Pacific and its Pacific Lines firemen who are represented by the Brotherhood of Locomotive Firemen & Enginemen. The creation of the board brought postponement of a strike which the brotherhood had called for April 2.

The dispute involved 89 issues, most of them grievance cases within the jurisdiction of the National Railroad Adjustment Board; and the parties agreed during the hearing to submit 75 of the issues to that board. Thus only 14 were left for consideration by the emergency board. They involved such matters as requirements to be met by firemen before their promotion to engineers; compensation for student firemen; expenses for firemen called for service away from their regular division; pass arrangements for enginemen; pay of "firemen" on Diesel-electric locomotives in yard service; a demand for the assignment of a "fireman" to yard Diesels weighing 90,000 lb. or less; a request for alterations on some steam locomotives to provide more room in their cabs; and claims of individual firemen.

The board recommended that three of the latter be allowed; and it recommended that the request for the loco-

tive alterations be left open, noting that the S.P. had said it would make the alterations or retire the locomotives involved. If it does not do so, the board said the brotherhood would be free to renew its request for a definite agreement on the matter. As to the other 10 issues, the board recommended that the brotherhood proposals be not adopted.

Members of the board were Chairman Harry H. Schwartz, who was formerly a member of the National Mediation Board; Robert O. Boyd of Portland, Ore., and Daniel T. Valdes of Santa Fe, N.M.

No Engineers' Strike—Yet

Because "further negotiations" in the dispute over demands for a second engineman on multiple-unit Diesel-electric locomotives are still "entirely possible," in the opinion of James P. Shields, spokesman for the Brotherhood of Locomotive Engineers, there will be no immediate strike against the 15 Western railroads on which strike votes have already been taken by that organization.

As reported in last week's *Railway Age*, the brotherhood has rejected the report of the Presidential emergency board which turned down the union's demands for a second man, and could legally call a strike on or after May 11. Mr. Shields did not explain the reasons for delaying the walkout, but was quoted as saying that "When we decide to strike, we will give ample notice for our own men and for the carriers."

Two Reports Issued by A.A.R. Accounting Committee

E. H. Bunnell, vice-president of the Association of American Railroads, has sent to chief accounting officers of A.A.R. member roads two reports recently completed by the Accounting Division's special committee on research. The reports are entitled "Railroad Budgetary Procedures," and "Procedures Recommended for Use by Railroad Stationery, Forms and Records Committees."

U. S. Chamber Would Legalize Delivered-Price Selling

Enactment of legislation to legalize selling on a delivered-price basis was recommended in one of the "policy declarations" adopted by the Chamber of Commerce of the United States at its annual meeting in Washington, D. C., last week. Another declaration on social security called for inclusion of railroad employees under the general social security program.

All except one of the transportation declarations recommended by its Transportation and Communication Department Committee (see *Railway Age* of April 16, page 74) were also adopted by the chamber. The exception was the proposed declaration calling for repeal of the taxes on amounts paid for transportation services. The chamber's pronouncement on this matter was embodied

in a general declaration on excise taxes.

"Excise taxes equitably devised and non-discriminatory as between competing industries," the declaration said, "should continue to be an important feature of the revenue system. Such taxes at low rates upon articles of wide use, but not of first necessity, are needed to supplement income taxes. The war increases in excises and all levies of a nuisance type should be repealed. Removal of the war increases of excises applicable to the essential services rendered by publicly regulated agencies is of immediate importance."

The declaration on delivered pricing practices referred to the United States Supreme Court's recent decision affirming a Circuit Court of Appeals ruling which upheld a Federal Trade Commission order outlawing use of basing-point plans by manufacturers of rigid steel conduit (see *Railway Age* of April 30, page 53). The legislation which the chamber has in mind should, as the declaration put it, "assure sellers that in the absence of conspiracy, combination or illegal agreement to fix prices, they may sell at delivered prices and compete with other sellers located closer to prospective customers by equalizing transportation costs or by absorbing part or all of such transportation costs, in order to have a competitive price."

The declaration calling for abandonment of the railroad social security system had this to say: "To the utmost feasible extent social security programs should be uniform and non-discriminatory. . . . Existing federal legislation providing the special discriminatory . . . system for railroad employees should be repealed, with suitable transitional provisions; and railroad employees should then be included within the coverage of appropriate general social security programs."

March Truck Traffic

Motor carriers reporting to American Trucking Associations transported in March a total of 3,312,515 tons of freight, an increase of 12.1 per cent above the previous month's total of 2,954,041 tons and 0.9 per cent above the 3,284,271 tons hauled in March, 1948. The figures, according to A.T.A., are based on comparable reports from 317 carriers in 43 states.

Government Reparation Claims Opposed by Security Owners

The Railroad Security Owners Association has asked the Interstate Commerce Commission for leave to intervene in the 17 pending proceedings wherein the federal government is seeking large reparation awards on the basis of allegations that it was overcharged by the railroads on its shipments of various commodities during World War II. The association's petition put it on record in opposition to the government's claims.

It estimated that allowance of the claims

would cost the railroads "in excess of \$2 billion," and argued, with supporting figures, that if the carriers were required to pay any such amount, or a substantial part of it, "their credit would be seriously impaired and the possibility of their being able to obtain funds at reasonable rates for necessary improvements would be rendered more difficult if not impossible." The supporting figures, taken from the commission's latest annual report, showed that as of July 31, 1948, the cash and temporary cash investments of Class I roads totaled \$1,878 million, while their net working capital, excluding materials and supplies, totaled only \$795 million.

This current condition prevailed "only because of conservative dividend policies," the petition continued, adding that the working-capital position of Class I roads as a whole has been "deteriorating" since the foregoing figures were compiled. The association also raised a question as to the equity of requiring the railroads to pay reparations on the basis of wartime revenues which were subjected to heavy income and excess-profits taxes.

"The government," the petition said in that connection, "cannot equitably be permitted to recover from the railroads twice, once through income and excess profits taxes and a second time by a return of revenue that produced the earnings on which such taxes were collected. Consequently, under any circumstances, consideration must be given to the income and excess profits taxes heretofore paid on the amounts sought by the government as reparations."

In arguing that it should be allowed to intervene, the association told the commission that its members, which include life insurance companies and mutual savings banks, hold approximately \$2 billion in railroad securities. "As creditors of the railroads," these members have an interest "in the financial stability of the carriers," the petition added.

Grant More Time in Lincoln Suit

The western railroads and other defendants in the government's anti-trust suit being heard at Lincoln, Neb., have been granted a further extension of time within which to file supplemental pleadings and to specify additional grounds for objection to testimony heretofore offered by the Department of Justice. The district court gave an extension of 45 days after the entry of final orders by the Interstate Commerce Commission in Section 5a, Application No. 2, Western Traffic Association, and Section 5a, Application No. 7, filed by the carriers in regard to per diem, mileage and demurrage, and storage agreement, or until further order of the court.

Additional General News appears on
pages 83, 84 and 85

SUPPLY TRADE

Allen R. Binckes, a mechanical engineer with some 14 years of experience in engineering and sales work with the Whiting Corporation, Harvey, Ill., has been appointed district sales manager for the firm's Pacific Coast area, with headquarters at 5649 Alhambra avenue, Los Angeles, Cal. Appointed to assist Mr. Binckes is **Harold Overman**, who has served with the company for 10 years in various capacities.

The American Brake Shoe Company has appointed **James R. Shepard** as Western district works manager of the brake shoe & castings division, with headquarters at Chicago, and **Thomas J. Wood** as Eastern



James R. Shepard

district works manager, with headquarters at New York. The appointment of **Eads Johnson, Jr.**, as assistant vice-president of the Southern wheel division, at New York, also was announced.



Thomas J. Wood

Mr. Shepard attended Yale University and joined Brake Shoe in 1937 as an apprentice. He was Eastern district works manager at New York at the time of his recent appointment. Mr. Wood was graduated from Lehigh University and

joined the company in 1939. Before his recent appointment he was superintendent of the division's Mahwah (N. J.) plant.



Eads Johnson, Jr.

Mr. Johnson joined Brake Shoe after he graduated from college in 1934. He was sales representative of the brake shoe & castings division at the time of his recent appointment.

Perry L. Francis, formerly general manager of sales of the Alan Wood Steel Company, has been elected vice-president in charge of sales. Mr. Francis joined the Alan Wood sales organization in 1924



Perry L. Francis

and has served the company in San Francisco, Cal., Los Angeles, and Seattle, Wash. On February 5, 1947, he was appointed general manager of sales at the company's home office in Conshohocken, Pa.

John D. Riley, district sales engineer at the Boston (Mass.) office of the Link-Belt Company, has been appointed district manager at Newark, N. J., succeeding the late **George E. Ramsden**.

Iron & Steel Products, Inc., Chicago, has moved its New York office from 120 Liberty street to 50 Church street.

The Vapor Heating Corporation has announced the appointments of **L. A. Rich-**

ardson and **J. E. Morris** as district managers in charge of sales and service to railroads, with headquarters, respectively, at Washington, D. C., and St. Paul, Minn.

John Burkhardt has been appointed traffic manager of the Hewitt Restfoam division of **Hewitt-Robins, Inc.**, Buffalo, N. Y. Mr. Burkhardt also will continue in the same capacity in the Hewitt rubber division.

The Capehart-Farnsworth Corporation, newly formed and wholly owned subsidiary of the International Telephone & Telegraph Corporation, has announced the election of **Ellery W. Stone** as president and **David R. Hull** as executive vice-president.

Frank C. Neal, Jr., who has been associated with the General Electric Company since 1936, has been appointed manager of the distributor sales division of the company's welding divisions. Mr. Neal will make his new headquarters at Fitchburg, Mass., and will be succeeded as manager of the Houston, Tex., welding division by **Preston D. Morgan**.

Carl M. Marberg, for the past two years coordinator of research planning for the Standard Oil Company of Indiana, has joined the research staff of the **Gustin-Bacon Manufacturing Company**, Kansas City, Mo.

Goff Smith has been appointed sales engineer for the American Steel Foundries, at New York. He joined the company in 1946, after six years in the Army Ordnance Corps.

George M. Woods has been appointed manager of the transportation section, industry engineering department, of the Westinghouse Electric Corporation to succeed **H. E. Dralle**, who has been transferred to the engineering and service department. Mr. Woods has been associated with the corporation since 1911.

The Maumee Malleable Castings Company, Toledo, Ohio, has announced the following changes in management: **E. H. Doering**, general manager since 1945, has been appointed executive vice-president and will devote most of his time to coordinating sales of Maumee Malleable and the American Boiler & Foundry Co., a subsidiary in Milan, Mich.; **N. P. Mahoney**, formerly superintendent, has been promoted to plant manager; **R. E. Bossert**, in charge of the plant's pattern department since 1935, has been appointed sales manager; and **H. M. Breeze** has been appointed secretary in addition to being treasurer and purchasing agent.

The Universal Carloading & Distributing Co. has moved its executive offices to 345 Hudson street, New York.

Thomas J. Little, eastern sales manager of the Pyle-National Company, New York, has been elected vice-president in charge of the Eastern division at New York,

succeeding A. N. Martin, whose retirement was reported in the *Railway Age* of April 2. Mr. Little spent the first five year of his business career with the Anaconda Copper Mining Company and the next four years in the study of electrical engineering at Union College, and the



Thomas J. Little

General Electric engineering test departments at Schenectady, N. Y., and Pittsfield, Mass., where he specialized in railway electrification and high-voltage work. After completion of this training he returned to Anaconda and worked for five years as electrical engineer and electrical superintendent of the firm's Anaconda (Mont.) and Butte properties. In 1925 he became a member of the sales organization of the Anaconda Wire & Cable Co., New York, and subsequently served as sales engineer, manager of transmission sales and executive assistant. In February, 1948, he was appointed eastern sales manager of Pyle-National.

A. M. Wiggins, whose election as vice-president of the Westinghouse Air Brake Company was announced in the *Railway Age* of May 7, page 65, was graduated



A. M. Wiggins

from Purdue University in electrical engineering and attended the Cleveland Law School. Mr. Wiggins joined Westinghouse Air Brake in 1933 as a patent

attorney and, in 1938, was placed in charge of the legal department. In April, 1945, he was elected an assistant vice-president in charge of patent and legal matters and one year later he was appointed executive assistant to the president, the position he held at the time of his recent election.

At a board of directors meeting on May 2, William H. White was elected vice-president of the Morris B. Brewster Company, and the T-Z Railway Equipment Company, Chicago, with headquarters remaining at Roanoke, Va. Mr. White has been associated with the two firms continuously since 1934, engaged in the re-designing of sander equipment and in the servicing of all equipment. He was born at Salem, Va., on May 10, 1879, and began his career as a helper in the Norfolk & Western's shops in Bluefield, W. Va., in 1902. In the following year he was transferred to the road's shops in West Roanoke, Va. He became pipe fitter mechanic in 1906, organized the Graham-White Sander Corporation in 1914,



William H. White

and returned to the West Roanoke shops in 1918. He was subsequently advanced to inspector of new locomotives and, during World War I, was employed in the inspection and test section of the United States Railroad Administration. Mr. White later returned to the N. & W.'s West Roanoke shops, and in 1924 was re-employed by the Graham-White Sander Corporation. He remained with the latter firm until he became associated with the Morris B. Brewster and T-Z Railway Equipment Companies in 1934.

John W. Humphrey, formerly executive vice-president of the Philip Carey Manufacturing Company, Cincinnati, Ohio, has been elected president to succeed Robert S. King, elected chairman of the board at the recent board of directors' annual organization meeting. Mr. King in turn succeeds George A. Rentschler, who will continue as chairman of the executive committee. The election of L. W. Clarke, formerly general sales manager, as vice-president in charge of sales to succeed

E. W. Smith, resigned, also was announced.

The Timken Roller Bearing Company has announced the appointment of Homer L. Hexamer as district manager of the railway division at St. Louis, Mo. Mr. Hexamer was graduated from Purdue University and joined Timken in 1928 as a draftsman for the railway division. From 1933 to 1936 he was a railway service engineer and from 1936 to 1946 he worked in the railway sales department at Canton, Ohio. In the latter year he was appointed sales engineer for the railway division at St. Louis, the position he held at the time of his recent appointment.



Homer L. Hexamer

mer was graduated from Purdue University and joined Timken in 1928 as a draftsman for the railway division. From 1933 to 1936 he was a railway service engineer and from 1936 to 1946 he worked in the railway sales department at Canton, Ohio. In the latter year he was appointed sales engineer for the railway division at St. Louis, the position he held at the time of his recent appointment.

Max K. Ruppert, president of the P. & M. Co., Chicago, whose election also as vice-president of Poor & Co., Chicago, was reported in the *Railway Age* of April 30, was born at Grand Rapids, Mich., on June 5, 1899. He was graduated from the New Mexico Military Institute at Roswell, N. M., and, before joining the P. & M. Co., served on



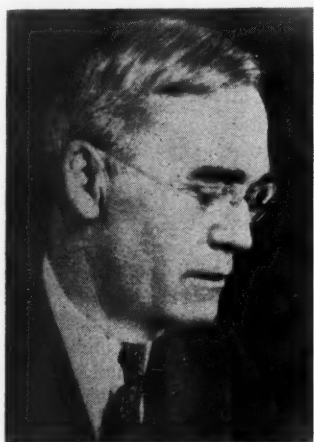
Max K. Ruppert

the Chicago, Rock Island & Pacific as chainman, rodman, ballast inspector and rail inspector. In 1924 he was appointed foundry inspector for the P. & M. Co.,

and later held the positions, successively, of service engineer, salesman, assistant eastern manager and vice-president. Mr. Ruppert was elected president in 1943.

OBITUARY

Frank B. Bell, founder and chairman of the board of the Edgewater Steel Company, died on May 6, after an illness of several weeks. Mr. Bell was born in Mercer, Pa., on September 24, 1876, and attended the public schools there. He obtained a degree in mechanical engineering from Lehigh University in 1897 and received a doctor of engineering degree from that university in 1944. Mr. Bell was appointed assistant open hearth superintendent for the Clairton Steel Company after several years' experience in the steel industry with various Pittsburgh, Pa., firms. In 1905 he was ap-



Frank B. Bell

pointed assistant superintendent of the Latrobe Steel & Coupler Co., Melrose Park, Ill. He left that company in 1908 to build the Inter Ocean Steel Company plant at Chicago Heights, Ill., which later became part of the Railway Steel Spring Company, now a subsidiary of the American Locomotive Company. In 1916, Mr. Bell returned to Pittsburgh and organized the Edgewater Steel Company, to produce railroad wheels, tires, and rings with a mill he designed that utilized a new rolling principle. He also had been chief of the Pittsburgh district of the Army Ordnance Association since 1930.

FINANCIAL

White Sees Real Threat Of Government Ownership

"Government ownership of railroads will occur in less than 10 years" unless there is a change in the public attitude toward transportation problems, William White, president of the Delaware, Lackawanna & Western, told stockholders of

that road at their annual meeting in New York on May 10.

"All railroads," Mr. White said, "are at a competitive disadvantage, owing to subsidized transportation services. Unless such subsidies are corrected, the process of slow strangulation of the railroads, which has existed for 25 years, will continue, and nationalization might come, due to inertia upon the part of the public. . . . That will be only the beginning of widespread government ownership of industry." So far as truck subsidies are concerned, Mr. White expressed the view that the situation will have to be corrected by the state legislatures.

Mr. White also said he deplored the fact that the railroad industry had not been allowed by regulatory authorities to earn more during the prosperous war and postwar years, and thought an 8 per cent return would not have been excessive, in view of "50-cent dollars" and prevailing high wages and prices.

L. V. Security Holders Assent to Reorganization

Holders of more than the required 75 per cent of each class of securities affected by the proposed reorganization of the Lehigh Valley under the so-called Mahaffie Act have assented to the readjustment plan, according to an announcement made at New York on May 10 by C. A. Major, president of the company. The Lehigh Valley thus becomes the first major carrier to utilize the provisions of the 1948 law (Section 20b of the Interstate Commerce Act) under which railroads may modify their bond structures according to plans which meet the approval of the Interstate Commerce Commission and holders of three-quarters of each issue involved.

"We are particularly gratified," Mr. Major's statement said, "that our plan has been so well received that in the short space of 12 weeks the holders of seven different bond issues and of the common stock, representing in all \$190 million in face amount of security values, have signified approval by the requisite percentage.

"This response means that the Lehigh Valley is in position to meet satisfactorily the serious financial problems presented by the approaching maturity of \$35 million of senior debt. In view of the two sinking funds provided by the plan and the fact that \$2,300,000 of fixed charges will be converted into contingent charges, we are hopeful that our securities will enjoy a higher credit standing."

The reorganization plan, which was outlined in detail in the *Railway Age* of February 19, page 61, was approved by the I. C. C. in that month. The official mailing of the proposed plan to the security holders, pursuant to authorization by the commission, took place on February 16. Supplemental mortgage indentures necessary to put the plan into

effect are expected to be ready next week.

Erie.—Control of Leased Lines.—This road has withdrawn its application to the Interstate Commerce Commission for authority to acquire, through stock ownership, control of the Goshen & Deckertown and the Montgomery & Erie, both of which it now operates under lease (see *Railway Age* of March 5, page 70).

Gulf, Mobile & Ohio.—Acquisition of K. C., St. L. & C.—Division 4 of the Interstate Commerce Commission has authorized this road to purchase the properties of its subsidiary, the Kansas City, St. Louis & Chicago, and to assume direct liability for the latter's guaranteed, 4½ per cent, first-mortgage bonds, which are outstanding in the amount of \$2,083,800. The Kansas City was part of the former Alton which operated it under a perpetual lease. It thus came under control of the Gulf when the latter acquired the Alton and assumed the lease. The transactions now approved by the commission contemplate that the Gulf will cancel the debts now due it from the Kansas City; terminate the lease; and surrender for cancellation the Kansas City's capital stock, all of which is held by the Gulf. The Kansas City company will then be dissolved with resultant annual savings of about \$30,000, including \$25,000 in taxes and \$5,000 in corporate expenses. Also, the new set-up is expected to facilitate the financing of capital improvements. The bonds for which the Gulf will assume direct liability (it is now the guarantor) are dated May 31, 1947, and mature May 31, 2022. Their indenture includes sinking-fund provisions.

In acting favorably on the Gulf applications, Division 4 followed recommendations of the proposed report made in the proceeding (Finance Docket No. 16325) by Examiners Jerome K. Lyle and F. E. Grutzik. Thus, like the examiners, it was unmoved by the plea of interveners who contended that favorable action would be adverse to interests they represent—an estate owning \$348,000 of the Kansas City bonds which were received in exchange for K. C. preferred stock on consummation of the Alton reorganization (see *Railway Age* of April 2, page 58).

New York, Chicago & St. Louis.—New Director.—James H. Coolidge, vice-president and treasurer of Thompson Products, Inc., and a director of the Wheeling & Lake Erie, has been elected to the Nickel Plate's board of directors to succeed the late Edward J. Fleming.

New Securities

Applications have been filed with the Interstate Commerce Commission by:

Missouri-Kansas-Texas.—To assume liability for \$2,550,000 of equipment trust certificates to finance in part the acquisition from General Motors Corporation,

Electro-Motive Division, of four 4,500-hp. Diesel-electric road-freight locomotives, costing \$478,302 each and consisting of 2 "A" and 1 "B" units of 1,500 hp. each; and four 3,000-hp. Diesel-electric road-freight locomotives, costing \$327,120 each and consisting of 2 "A" units of 1,500 hp. each. Total estimated cost of all the equipment is \$3,221,688. Then certificates would be dated June 15, would mature in 30 semi-annual installments of \$85,000 each, beginning December 15, 1949, and would be sold on the basis of competitive bids with the interest rate fixed by such bids.

Pennsylvania.—To assume liability for \$10,425,000 of equipment trust certificates to finance in part the following equipment:

	Description and builder	Estimated Unit Cost
6	1,500-hp. Diesel-electric "A" unit freight locomotives (Baldwin Locomotive Works)	\$182,000
6	1,500-hp. Diesel-electric "B" unit freight locomotives (Baldwin)	157,000
4	1,500-hp. Diesel-electric "A" unit freight locomotives (General Motors Corporation, Electro-Motive Division)	182,500
4	1,500-hp. Diesel-electric "B" unit freight locomotives (Electro-Motive)	154,500
10	1,000-hp. Diesel-electric switching locomotives (Fairbanks, Morse & Co.)	100,000
3	380-hp. Diesel-electric switching locomotives (General Electric Company)	50,300
2	10 single-bedroom, 6 double-bedroom all-stainless steel sleeping cars (Budd Company)	148,000
6	All-stainless steel single dining cars (Budd)	146,000
6	All-stainless steel full dining cars (Budd)	129,000
6	All-stainless steel kitchen-dormitory cars (Budd)	146,000
2	All-stainless steel coach-bar-lounge cars (Budd)	136,000
3	Steel passenger cars (American Car & Foundry Co.)	113,000
2	Steel passenger cars (Pullman-Standard Car Manufacturing Company)	105,000
2	21 single-bedroom, steel sleeping cars (Pullman)	141,000
6	10-single-bedroom, 6-double-bedroom steel sleeping cars (Pullman)	131,000
8	10-single-bedroom, 6-double-bedroom steel sleeping cars (Pullman)	136,000
500	Steel gondola cars (Pennsylvania shops)	5,400

Total estimated cost of all of the equipment is \$13,031,250. The certificates would be dated May 1, would mature in 15 annual installments of \$695,000 each, beginning May 1, 1950, and would be sold on the basis of competitive bids, with the interest rate fixed by such bids.

Division 4 of the I.C.C. has authorized:

Chicago & Western Indiana.—To pledge and repledge from time to time, within a period of 2 years from April 25, as collateral security for notes, all or any part of \$780,000 of its first and refunding mortgage bonds, series D, now held in its treasury. Proceeds of the notes, which would be issued within the limitations of section 20 a(9) of the Interstate Commerce Act, would reimburse the C.&W.I. for expenditures on additions and betterments to its property; and for payments made to its lessor, the Belt of Chicago, on account of track changes and improvements made by the latter on the leased property.

Illinois Central.—To assume liability for \$5,520,000 of series DD equipment trust certificates to finance in part 1,500 50-ton steel hopper cars at a unit cost of

\$3,860 and 375 50-ton flat cars at a unit cost of \$4,285, all to be built at the I.C.'s Centralia, Ill., shops at a total cost of \$7,396,875. The certificates will be dated May 1 and mature in 20 semiannual installments of \$276,000 each, beginning November 1, 1949. The commission's report approved a selling price of 99.4715 with a 2¼ per cent interest rate—the bid of Halsey, Stuart & Co. and 11 associates, which will make the average annual interest cost approximately 2.36 per cent. The certificates were reoffered to the public at prices yielding from 1.35 to 2.525 per cent, according to maturity.

Indiana Harbor Belt.—To assume liability for \$2,050,000 of equipment trust certificates to finance in part 21 Diesel-electric locomotives and 25 hopper cars at an estimated cost of \$2,603,609 (see *Railway Age* of April 23, page 61). The certificates will be guaranteed by the I.H.B.'s proprietary companies—the New York Central, the Michigan Central, the Chicago & North Western, and the Chicago, Milwaukee, St. Paul & Pacific. They will be dated May 1 and will mature in 10 annual installments of \$205,000 each, beginning May 1, 1950. The commission's report approved a selling price of 99.519 with a 2¾ per cent interest rate—the bid of Salomon Brothers & Hutzler and three associates, which will make the average annual interest cost approximately 2.49 per cent. The certificates were reoffered to the public at prices yielding from 1.5 to 2.6 per cent, according to maturity.

Dividends Declared

Albany & Vermont.—\$1.25, semi-annual, payable May 16 to holders of record April 30.

Chicago, Burlington & Quincy.—\$3.00, payable June 28 to holders of record June 15.

Seaboard Air Line.—5% preferred, \$2.50, payable June 30 to holders of record June 10; \$1.25, payable September 30 and December 31 to holders of record September 9 and December 9.

West Jersey & Seaboard.—6% special guaranteed, \$1.50, semi-annual, payable June 1 to holders of record May 14.

Average Prices Stocks & Bonds

	May 10	Last week	Last year
Average price of 20 representative railway stocks	38.79	38.87	53.14
Average price of 20 representative railway bonds	86.37	86.59	88.66

CAR SERVICE

The Car Service Division of the Association of American Railroads on May 9 issued an embargo against virtually all freight destined for export to the Hawaiian Islands through West Coast ports. C. S. D. Chairman Arthur H. Gass said this was done at the request of the Interstate Commerce Commission to prevent the accumulation of freight cars at West Coast ports which would be caused by a strike of longshoremen now going on in Hawaii. Because freight cannot be unloaded at its destination, steamship lines are not taking on further cargo, he stated. Military or government freight for loading on ships operated by the Army or the Navy is exempt from the embargo.

ORGANIZATIONS

The Passenger, Ticket & Freight Agents' Association of Texas held its forty-second annual meeting on May 6 and 7, at the Seybold Guest Ranch, Mineral Wells, Tex. The group was addressed by Loyd Kiernan, manager of special services, public relations department, Association of American Railroads, on the subject, "Where Do We Go From Here?" Miss Velma McPeck, supervisor of passenger train service, Chicago, Burlington & Quincy, spoke on "Women in Railroad-ing."

EQUIPMENT AND SUPPLIES

FREIGHT CARS

10,587 Freight Cars Delivered in April

Freight-train cars for domestic use delivered during April totaled 10,587, including 2,088 delivered by railroad shops, compared with March deliveries of 11,882 cars, which included 2,942 delivered by railroad shops, the American Railway Car Institute has announced. April deliveries included 1,701 box cars, 5,893 hopper cars, 2,012 gondola cars, 440 refrigerator cars, 409 tank cars and 132 cars of other types.

Freight-train cars ordered last month for domestic use numbered 30, all from contract car builders, compared with March orders for 469, which included 200 ordered from railroad shops, the institute said. Freight-train cars for domestic use on order and undelivered on May 1 amounted to 62,569, including 27,246 on order from railroad shops, compared with 73,188 cars on order April 1 and 134,676 cars on order May 1, 1948.

LOCOMOTIVES

The Chicago & Eastern Illinois has ordered 14 Diesel-electric locomotive units from the Electro-Motive Division of General Motors Corporation. Included in the order were 10 1,500-hp. road units and 4 1,000-hp. switching units.

The Central of Georgia has ordered five 1,500-hp. Diesel-electric road-switching locomotives from Fairbanks, Morse & Co., and two 1,000-hp. Diesel-electric road switchers from the Baldwin Locomotive Works.

SIGNALING

The American Locomotive Company has ordered five sets of intermittent inductive train control equipment from the

20 wheel sets in 8 hours



with profiling



The first car-wheel lathe with profiling attachment is now in operation at the Ivorydale shops of the B&O.

The Baltimore & Ohio reports that with this machine a pair of wheels can be turned in 12 to 14 minutes—and that normal production for an 8-hour day is 18 to 20 pairs!

* * *

This Niles profiling attachment is on a standard Niles hydraulic-feed car-wheel lathe. It permits the use of carbide tools—at speeds of 150 to 190 feet per minute with $\frac{1}{2}$ " feed per minute. With the carbide tools, shallower cuts can be taken to true up wheels. And a single cut completes the cutting, the finishing, and the flanging cycles, eliminating the use of separate finishing and forming tools.

In addition to the higher production, profiling brings these advantages:

- Both wheels are turned to exactly the same tape size.
- Minor skid flats can frequently be turned out with cuts of as little as $\frac{1}{8}$ inch—at a big saving in metal (and wheel life!).
- Because of lower tool pressure, concentricities of .002 to .004 can be obtained—at least equal to those produced by grinding.

For further information, call the Lima-Hamilton sales offices in New York or Chicago, or write directly to Lima-Hamilton Corporation, Hamilton, Ohio.



DIVISIONS: Hamilton, Ohio—Niles Tool Works Co.; Hooven Owens, Rentschler Co. Lima, Ohio—Lima Locomotive Works Division; Lima Shovel and Crane Division.

PRINCIPAL PRODUCTS: Niles heavy machine tools; Hamilton diesel and steam engines; Hamilton heavy metal stamping presses; Hamilton-Kruse automatic can-making machinery; Locomotives; Cranes and shovels; Special heavy machinery; Heavy iron castings; Weldments.

General Railway Signal Company for installation on passenger Diesel-electric locomotives for the Erie.

The Southern Pacific has ordered from the Union Switch & Signal Company materials to install centralized traffic control on 3 mi. of single track from Alhambra, Cal., west to Aurant, as an extension of an existing installation between Alhambra and Indio, Cal. The order includes a 2-ft. 6-in. section to be added to the existing control machine; code apparatus, relays, style M-22A dual-control switch machines, style H-2 searchlight signals, and housings. Construction work will be done by railroad forces.

CONSTRUCTION

Chicago, Burlington & Quincy.—This road has filed with the Interstate Commerce Commission an amendment to its pending application for commission approval of its plan to shorten its Chicago-Kansas City, Mo., main line. The amendment said that the proposed trackage rights between Birmingham, Mo., and Missouri City Junction would be over 16.05 mi. of Wabash line, instead of 12.57 mi. as stated in the original application; and that the line to be constructed by the recently organized Kansas City & Brookfield between Missouri City Junction and Tina Junction, Mo., would be 42.3 mi. in length, instead of 45.3 mi. Thus the proposed new line would be 22 (instead of 23) miles shorter than the Burlington's present Chicago-Kansas City line. (See *Railway Age* of February 5, page 119, and February 26, page 57.)

Illinois Central.—Division 4 of the Interstate Commerce Commission has authorized this road to construct a 9.45-mi. branch from its main line near Bois, Ill., easterly to a connection with a spur track of the Chicago, Burlington & Quincy. The line will permit the I.C. to participate in serving a new coal-mining development in Jefferson County, Ill.; it is being built pursuant to arrangements with the Burlington and the Missouri Pacific, which will also serve the same mines. As the division's report described the arrangements, they contemplate that the M.P. will build an 0.5-mi. lead track from Scheller, Ill., to a connection with the branch, from which point easterly approximately 1.02 mi. the branch will be built, owned, and operated jointly by the I.C. and M.P. From the eastern end of this joint segment easterly approximately 1.13 mi., to a connection with the Burlington's spur track, the branch will be a joint line of the three roads; this segment will include yard tracks for classification and storage purposes. The estimated total cost of all the construction involved is \$1,018,000, of which the I.C. would pay \$744,150. The report said the

Burlington and M.P. had advised the commission of their view that they required no authorization for construction of their lead tracks and their participation in the construction and ownership of the joint segments and yard facilities. The division found no reason for "disturbing" that conclusion which was based on a contention that such tracks and facilities would be "spurs" within the exemption provisions of the Interstate Commerce Act's section 1 (22).

RAILWAY OFFICERS

OPERATING

Francis E. Harrison, whose appointment as general superintendent of the Chicago, St. Paul, Minneapolis & Omaha (part of the Chicago & North Western System) at St. Paul, Minn., was reported in the *Railway Age* of April 23, was born on December 2, 1902, at Belvidere, Ill. He entered railroad service with the North Western in September, 1923, as a freight brakeman on the Galena division, and, from 1930 to 1942, was a freight conductor on the same division. After serving as a captain in the Army Transportation Corps for more than three years during



Francis E. Harrison

World War II, he returned to the North Western as yardmaster at the Chicago terminal in January, 1946. The same year he was advanced to assistant trainmaster, Galena division, and was subsequently appointed trainmaster at Boone, Iowa. Mr. Harrison was promoted to transportation inspector at Chicago in August, 1947, becoming acting superintendent at Green Bay, Wis., in the following year. From August to November, 1948, Mr. Harrison served as assistant superintendent on the Galena division, after which he was advanced to superintendent, Twin Cities Terminal, C. St. P. M. & O., at Minneapolis, Minn., the post he held at the time of his recent appointment.

W. O. Tracy, Jr., roadmaster of the Dry Fork Line of the Norfolk & Western at Iaeger, W. Va., has been promoted to assistant superintendent of the Radford division, with headquarters at Roanoke, Va., succeeding J. R. Altizer, deceased.

W. F. Koehn, who has been on leave of absence on account of illness, resumed his duties as general superintendent of the Ontario district of the Canadian Pacific at Toronto, Ont., on May 5. G. E. Mayne, who acted as general superintendent of the district during Mr. Koehn's absence, has returned to his duties as superintendent of the Montreal terminals division at Montreal, Que.

O. W. Limestall, whose promotion to general superintendent of transportation of the Chicago, Rock Island & Pacific at Chicago, was reported in the *Railway Age* of April 23, was born on January 9, 1902, at Fuels, Ill., and received his education in the public schools and through university extension work. He entered railroad service in 1918 as a telegrapher



O. W. Limestall

with the Illinois Terminal and two years later joined the Missouri Pacific as telegrapher and dispatcher. In 1922 he returned to the I. T. in his former capacity, rejoining the M. P. in 1923 as telegrapher agent and dispatcher. From 1927 to 1936 he served with the Toledo, Peoria & Western as dispatcher, chief dispatcher, assistant superintendent and superintendent. Mr. Limestall entered Rock Island service in 1936 as trainmaster, and subsequently held the positions of assistant superintendent and general superintendent. He became assistant general manager at Des Moines, Iowa, in June, 1945, in which post he was serving at the time of his recent promotion.

J. W. Murphy, division superintendent of the Atchison, Topeka & Santa Fe's Coast Lines at Needles, Cal., has been appointed division superintendent of the Gulf, Colorado & Santa Fe, with headquarters at Galveston, Tex., succeeding C. S. Neal, who has been granted a leave of absence on account of illness.



**Let's be
power-
thrifty**

For years to come some railroads will have steam locomotives. And it is merely business thrift to endeavor to get the most efficient operation possible from such motive power.

In many instances the installation of Security Circulators in existing steam locomotives will prove a profitable investment. Originally developed by American Arch as a support for Security arch brick, road experience has shown that Security Cir-

culators greatly improve steaming performance and aid in many other ways in increasing motive power efficiency.

* * *

For nearly forty years the American Arch Company has been designing and furnishing arch brick for coal-burning locomotives, and a recent development is the Security Dutch Oven for improving combustion in oil-burning steam locomotives.

American Arch Company Inc.

NEW YORK • CHICAGO

TRAFFIC

The Grand Trunk Western has announced the appointment of **B. H. Thome** as general agent at New York, succeeding **E. A. Russell**, whose transfer to Toledo, Ohio, was reported in the *Railway Age* of April 2.

Samuel W. Seeman, passenger representative of the Pennsylvania at Newark, N. J., has been promoted to district passenger agent at Denver, Colo., succeeding **George W. P. Roach**, who has been transferred to Pittsburgh, Pa., in the same capacity.

Dennis L. Dawson has been appointed general agent of the Kansas City Southern Lines at San Francisco, Cal., succeeding **L. A. McDaniel**, transferred.

J. H. Norton, traffic manager of the Atlantic region of the Canadian National at Moncton, N. B., retired on pension on May 1. Mr. Norton was born at Shaftsbury, England, on April 21, 1884, and entered railroad service in 1899 as junior clerk and messenger in the car service department of the Intercolonial (now C.N.R.). He then served as secretary to general freight agent and as assistant chief clerk in the general freight office of the Canadian Government Railways (now C.N.R.) at Moncton. Mr. Norton became division freight agent at Halifax, N. S., in 1917; assistant general freight agent at Moncton in 1919; general freight agent at Moncton in 1943 and traffic manager at Moncton in 1944, all with the C.N.R.

Carl M. Gautwick, whose promotion to general freight agent of the Northern Pacific at Chicago was reported in the *Railway Age* of May 7, began his career at that point on August 12, 1911, as a messenger for Traders Despatch, and subsequently served with the Canadian Northern (now part of the Canadian National) as clerk at Pittsburgh, Pa., and Chicago. In 1918 he joined the United States Army, and the following year became chief rate clerk for the Grand Trunk (also part of C.N.). He joined the N.P. in 1922 as a clerk, and was appointed traveling freight agent in 1924 and commercial agent in 1936. He advanced to assistant general freight agent in December, 1945, which position he held at the time of his recent promotion.

PURCHASES & STORES

D. H. Phebus, acting general storekeeper of the Chicago, Milwaukee, St. Paul & Pacific at Milwaukee, Wis., has been appointed general storekeeper at that point.

ENGINEERING & SIGNALING

C. S. Wilson, chemist for the Southern Pacific Lines in Texas & Louisiana, has been appointed engineer of tests, at Houston, Tex. His former position has been discontinued.

SPECIAL

H. E. Greer, Jr., has been appointed chief of personnel of the Reading, with headquarters at Philadelphia, Pa., succeeding **L. R. Mumper**, who, at his own request, has been assigned to other duties.

OBITUARY

Alex Grant, formerly superintendent of transportation for the Alton (now part of the Gulf, Mobile & Ohio) at Chicago, and who retired in 1947 as assistant superintendent of transportation of the G. M. & O. at Mobile, Ala., died at the Wesley Memorial hospital in Chicago on April 20.

Guy S. McCabe, who retired in 1928 as assistant to traffic manager of the Pennsylvania at Pittsburgh, Pa., died on May 3 of a kidney ailment at the Huntington Memorial hospital, Pasadena, Cal., at the age of 74.

Robert Lee Ettenger, former assistant to the vice-president (mechanical) of the Southern System at Washington, D. C., died there on May 7 at Emergency hospital, after a long illness. Mr. Ettenger, who was 86 years old, retired in 1938.

J. W. Spraker, Association of American Railroads inspector with the Illinois Central and for several years chairman of the A.A.R. Rules Committee of the Car Foremen's Association of Chicago, died of a heart ailment at his home in Chicago on May 5.

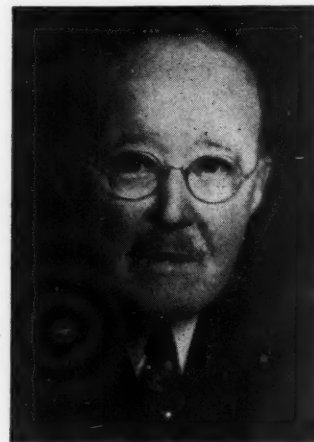
Martin Eckert, who retired in 1946 as chief accounting and financial officer of the Missouri Pacific Lines, died at his home in St. Louis, Mo., on May 6, at the age of 76.

Nathaniel L. Howard, who retired in 1929 as president of the Chicago Great Western at Chicago, died on May 6 at Pasadena, Cal., at the age of 65. Mr. Howard served with the Chicago, Burlington & Quincy for a number of years, being superintendent of system transportation in 1923 and 1924. He was general manager of the Chicago Union Station Company before his election as head of the Great Western in 1925.

John A. J. Orr, 85, who was for a number of years director of the insurance department of the New York, New Haven & Hartford, died at Bridgeport, Conn., on May 10.

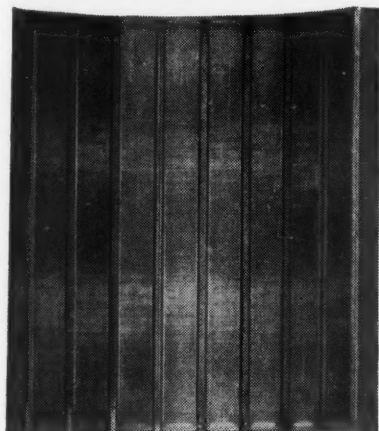
Ralph M. Shaw, late board chairman and general counsel of the Chicago Great Western at Chicago, whose death was reported in the *Railway Age* of May 7, began his legal career in 1892 at Chicago, where he first entered railroad service by defending various roads in personal injury suits. He was born at Paris, Ky., on February 18, 1869, and received his higher education at Transylvania Uni-

versity, Yale University and the law department of the University of Michigan. He joined the law firm of Winston & Meagher in 1893, became a partner five years later and, at the time of his death, on May 3, was senior partner in the successor organization of Winston, Strawn, Shaw & Black. That firm is counsel for a number of railroads, and Mr. Shaw was in personal charge of many important carrier cases. He represented the Pullman interests in the anti-trust suits which brought about divorcement of the sleeping car business from the manufacturing business, and handled a number of railroad reorganizations. The latter included that of the Chicago, Milwaukee & St. Paul, 1925-1928, in which Mr. Shaw served as counsel for the trustees. Among numerous other cases in which he figured



Ralph M. Shaw

prominently as attorney for carriers were: (1907) Chicago & Alton, wherein an indictment against the road for alleged payment of rebates was dismissed; (1912) Goodrich Transit Company and White Star Lines, wherein it was held that the Interstate Commerce Commission had authority to regulate the accounts kept by water carriers engaged in transportation partly by rail and partly by water under an arrangement for continuous carriage, and that the power of the commission extended to the accounts covering intrastate traffic and non-carrier activities; and (1919) Postal Telegraph Cable Company vs. Chicago Great Western, wherein Mr. Shaw successfully contended before the Supreme Court that the provision of the Interstate Commerce Act which permits a railroad company and a telegraph company to enter into contracts for exchange of services should not be narrowly construed, and should be held to include services rendered by each for the other beyond, as well as along, its lines. Mr. Shaw became assistant general counsel of the Great Western in 1915, and general counsel in 1918. He was elected board chairman of the reorganized company in 1941, and, at the time of his death, was also a director of the Chicago Junction and the Union Stock Yard & Transit Co.



GOOD

1 Silver wrist pin bushings from research locomotive #601. Corroded bushing on right illustrates what happens when corrosive additives are present in the lubricating oil. Good bushing at left had the same mileage but, thanks to DIOL RD, there is no corrosion.



CORRODED

Here's "TAILOR-MADE" Protection for your Diesels!

ONLY ESSO offers you "tailor-made" diesel locomotive lubricating oils, specially developed in a 3-year field test recently completed by the Esso Research Laboratories.

Over a half million miles of severe freight operation went into this unique experiment . . . the largest controlled field test ever conducted on diesel fuels and lubricants.


FROM THIS TEST came DIOL RD 74 and DIOL RD 76 . . . superior diesel locomotive lubricating oils that:

- 1** reduce power-robbing engine deposits
- 2** inhibit corrosion
- 3** fight oxidation
- 4** no additive lost

THE VALUABLE "KNOW-HOW" on diesel operation that was acquired in this important test is now available to the railroad industry...without obliga-

tion, of course. For further information, contact the Esso Railroad Sales Div., Esso Standard Oil Co., 15 West 51st Street, New York 19, N. Y.

The Sign of
QUALITY



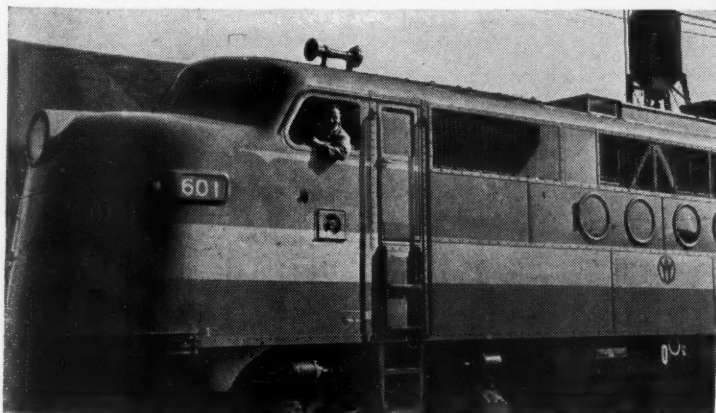
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SERVICE

RAILROAD PRODUCTS

SOLD IN: Maine, N. H., Vt., Mass., Conn., R. I., N. Y., Penna., N. J., Del., Md., D. C., Va., W. Va., N. C., S. C., Tenn., Ark., La.

ESSO STANDARD OIL COMPANY—Boston, Mass.—New York, N. Y.—Elizabeth, N. J.—Baltimore, Md.—Richmond, Va.—Charleston, W. Va.—Charlotte, N. C.—Columbia, S. C.—Memphis, Tenn.—Little Rock, Ark.—New Orleans, La.

ESSO STANDARD OIL COMPANY OF PENNSYLVANIA—Philadelphia, Pa.



2 **N. Y., O. & W. Locomotive #601**, Esso's laboratory on wheels. Consists of two Electro-Motive, F. T. freight units having V-type, 1,350 hp., 800 r.p.m., 16 cylinder, 8½ x 10 in., two cycle diesel engines plus a complete set of special testing instruments.



3 **Dr. Leonard Moody**, Standard Oil Development Company chemist, watches Clement Bovio, resident technician throughout test, taking crankcase oil samples.

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF MARCH AND THREE MONTHS OF CALENDAR YEAR 1949

Name of road	Av. mileage operated during period	Operating revenues			Maintenance of			Operating Expenses			Operating ratio	Net from railway operation	Net railway operating income	
		Freight	Passenger	Total (inc. misc.)	Way and structures	Equip-ment	Traffic	Trans- portation	Total	Railway tax accruals			1949	1948
Akron, Canton & Youngstown.....	March 171	395,870	41	417,104	74,571	49,168	29,248	128,252	307,884	43,220	52,886	109,211	1948	
Atchison, Topeka & Santa Fe System . . .	March 171	1,230,145	171	1,281,526	230,668	150,377	87,983	382,407	936,925	134,762	161,556	302,887		
Atchison, Topeka & Santa Fe System . . .	March 13,103	33,988,273	3,868,781	41,427,618	6,326,264	8,566,147	955,912	13,789,540	31,374,753	4,874,140	5,024,441	4,808,766		
Atlanta & St. Andrews Bay	March 82	93,020,710	12,046,486	115,441,374	17,389,960	24,667,179	2,691,811	41,531,767	91,667,529	10,828,514	12,589,466	10,828,514		
Atlanta & St. Andrews Bay	March 82	146,441	1,112	155,423	30,174	15,566	6,728	44,108	108,715	18,221	15,511	30,904		
Atlanta & St. Andrews Bay	March 82	522,603	3,714	547,202	93,395	50,526	20,373	141,409	340,253	82,617	80,527	107,748		
Atlanta & West Point	March 93	265,907	51,232	363,369	39,641	50,751	15,630	183,080	312,312	26,084	9,763	23,484		
Western of Alabama	March 133	757,270	147,942	1,031,666	110,055	156,415	45,397	125,401	908,265	75,451	27,541	48,849		
Atlantic Coast Line	March 133	271,835	52,432	360,756	48,010	59,241	15,444	159,511	303,225	34,788	26,558	34,688		
Atlantic Coast Line	March 133	1,477,349	147,247	1,630,202	173,045	173,045	45,025	470,844	883,996	97,732	57,624	114,546		
Atlantic Coast Line	March 5,562	10,056,434	2,194,909	13,144,946	1,637,113	2,231,717	303,069	5,003,537	9,738,943	1,700,000	1,504,195	1,460,036		
Atlantic Coast Line	March 5,562	27,801,466	6,537,013	36,896,627	4,782,517	6,243,082	960,843	14,637,053	28,340,370	3,900,000	3,923,019	4,122,145		
Charleston & Western Carolina	March 343	427,110	2,618	442,093	82,546	83,795	16,888	184,983	377,921	30,000	24,277	35,853		
Baltimore & Ohio	March 6,201	1,199,500	108,708	1,308,208	246,243	246,243	47,792	523,458	1,096,599	85,000	36,960	87,908		
Baltimore & Ohio	March 6,201	26,715,721	1,606,309	29,947,758	3,261,901	5,587,331	735,062	12,881,808	23,853,855	2,637,590	3,048,977	2,273,591		
Staten Island Rapid Transit	March 29	80,571,725	5,334,050	90,671,833	9,883,124	18,276,977	2,078,736	38,899,736	73,208,183	8,003,993	8,627,009	7,343,087		
Bangor & Aroostook	March 602	2,064,609	33,394	2,129,057	251,920	192,199	13,097	454,849	964,803	510,213	587,188	475,805		
Bessemer & Lake Erie	March 214	4,894,801	108,708	5,094,213	749,360	558,858	35,468	1,180,961	2,665,186	1,216	15,378	168,962		
Boston & Maine	March 1,757	1,071,619	914	1,094,617	174,294	576,146	17,888	4,489,983	1,249,604	114.2	154,987	154,987		
Boston & Maine	March 1,757	5,719,149	997,946	7,354,372	1,073,123	1,109,828	107,317	1,179,859	3,483,901	299,302	317,139	535,525		
Boston & Maine	March 1,757	15,802,574	3,220,121	20,841,109	3,268,433	3,371,414	314,521	9,230,256	7,570,182	78.2	1,604,190	972,953		
Burlington-Rock Island	March 228	344,041	409,671	65,394	65,394	33,842	4,969	167,055	291,796	8,889	47,327	24,324		
Cambria & Indiana	March 35	939,285	145,715	1,146,718	149,762	113,086	15,911	478,785	822,032	26,669	139,784	16,648		
Canadian Pacific Lines in Maine	March 35	400,565	400,565	801,130	42,629	225,954	2,696	20,694	128,828	20,014	26,394	8,304		
Canadian Pacific Lines in Maine	March 234	740,820	37,540	800,618	73,999	101,736	6,934	277,892	373,174	142,644	181,708	88,714		
Canadian Pacific Lines in Maine	March 234	2,126,293	37,540	2,163,833	230,020	306,193	20,939	808,740	1,408,784	26,529	220,790	166,524		
Canadian Pacific Lines in Vermont	March 90	138,862	15,346	166,954	27,895	34,999	5,410	143,911	219,753	117,875	8,889	47,327		
Central of Georgia	March 90	423,119	48,778	517,937	98,344	113,737	15,874	328,246	691,571	33.5	323,721	399,018		
Central of Georgia	March 1,815	2,730,905	262,727	3,266,935	497,386	509,872	111,276	1,514,321	2,807,562	85.9	459,373	270,930		
Central of New Jersey	March 415	7,654,560	769,442	9,177,386	1,397,158	1,522,868	334,494	4,409,043	8,187,486	89.2	989,900	280,849		
Central of New Jersey	March 415	2,483,796	483,174	3,166,066	488,097	609,098	58,779	1,651,743	2,986,063	194.3	385,014	1,121,220		
Central of New Jersey	March 415	7,319,788	1,473,933	9,414,105	1,374,443	1,830,429	162,414	5,018,392	8,927,238	94.8	486,867	1,815,173		
Central of Pennsylvania	March 212	1,330,894	13,154	1,379,312	123,400	245,456	24,592	452,877	901,397	65.4	477,915	892,023		
Central of Pennsylvania	March 212	4,180,090	47,903	4,227,993	422,556	798,205	72,180	1,421,491	2,849,330	65.8	1,482,921	2,128,903		
Central Vermont	March 422	6,940,000	46,000	7,000,000	194,432	194,432	15,395	375,430	774,606	97.3	213,394	47,212		
Chesapeake & Ohio	March 5,098	2,014,000	180,000	2,347,000	395,083	489,831	44,527	1,075,899	1,223,446	90.5	223,554	140,153		
Chesapeake & Ohio	March 5,098	19,380,767	683,501	20,064,268	2,709,493	4,494,194	562,444	8,289,438	17,200,180	180.2	3,782,923	2,152,246		
Chicago & Eastern Illinois	March 5,098	66,031,217	2,301,846	68,333,063	9,797,086	13,782,639	1,768,489	26,463,732	55,258,409	77.7	15,846,630	8,437,898		
Chicago & Eastern Illinois	March 909	2,097,499	278,381	2,375,880	344,092	467,588	100,869	1,055,355	2,122,304	80.7	506,854	131,680		
Chicago & Illinois Midland	March 909	5,920,864	955,845	6,876,709	751,313	1,396,336	318,407	3,206,725	6,363,658	83.8	1,227,144	499,007		
Chicago & Illinois Midland	March 131	542,628	774	543,402	72,877	129,012	25,196	179,400	52,602	70.2	120,562	15,480		
Chicago & North Western	March 8,076	11,480,849	2,430	11,483,279	2,483,833	3,029,513	307,278	610,119	1,464,297	78.5	622,765	332,371		
Chicago & North Western	March 8,076	31,312,750	1,512,663	32,825,413	4,422,752	7,917,749	894,186	7,369,837	13,044,217	95.4	711,222	3,069,093		
Chicago, Burlington & Quincy	March 8,714	16,234,078	1,173,560	17,407,638	2,303,111	3,300,051	475,470	6,668,445	13,524,142	70.9	5,548,623	2,693,190		
Chicago, Burlington & Quincy	March 8,714	43,651,078	52,191,074	95,842,152	10,114,341	10,114,341	10,114,341	20,114,381	40,192,375	72.2	11,998,499	7,541,422		
Chicago Great Western	March 1,500	2,661,340	25,493	2,686,833	481,656	311,370	107,911	1,060,128	2,021,475	72.2	787,668	296,993		
Chicago, Indianapolis & Louisville	March 541	1,371,669	71,099	1,442,768	265,629	253,215	79,490	3,254,534	6,103,163	72.0	2,021,475	901,923		
Chicago, Indianapolis & Louisville	March 541	3,872,665	272,799	4,145,464	737,204	791,749	239,627	1,389,345	1,832,040	83.5	253,834	172,636		
Chicago, Indianapolis & Louisville	March 541	3,872,665	272,799	4,145,464	737,204	791,749	239,627	1,389,345	1,832,040	83.5	253,834	172,636		
Chicago, Burlington & Quincy	March 8,714	16,234,078	1,173,560	17,407,638	2,303,111	3,300,051	475,470	6,668,445	13,524,142	70.9	5,548,623	2,693,190		
Chicago, Burlington & Quincy	March 8,714	43,651,078	52,191,074	95,842,152	10,114,341	10,114,341	10,114,341	20,114,381	40,192,375	72.2	11,998,499	7,541,422		
Chicago Great Western	March 1,500	2,661,340	25,493	2,686,833	481,656	311,370	107,911	1,060,128	2,021,475	72.2	787,668	296,993		
Chicago, Indianapolis & Louisville	March 541	1,371,669	71,099	1,442,768	265,629	253,215	79,490	3,254,534	6,103,163	72.0	2,021,475	901,923		
Chicago, Indianapolis & Louisville	March 541	3,872,665	272,799	4,145,464	737,204	791,749	239,627	1,389,345	1,832,040	83.5	253,834	172,636		
Chicago, Milwaukee, St. Paul & Pacific	March 10,670	17,379,260	1,261,501	18,640,761	2,774,661	4,060,676	451,297	9,833,360	17,322,962	84.2	3,241,774	1,191,381		
Chicago, Milwaukee, St. Paul & Pacific	March 10,670	47,548,491	4,211,976	51,760,467	8,048,677	12,311,263	1,275,695	27,501,455	49,737,074	91.1	5,037,093	920,987		
Chicago, Rock Island & Pacific	March 7,620	12,899,078	1,662,688	14,561,766	1,823,878	2,546,228	453,876	5,494,111	11,995,655	72.3	4,337,817	1,396,063		
Chicago, Rock Island & Pacific	March 7,620	35,100,108	5,493,216	40,593,324	4,987,241	6,923,240	1,387,101	17,090,901	33,550,101	76.1	10,477,176	3,121,401		
Chicago, St. Paul, Minn. & Omaha	March 1,617	2,364,308	179,599	2,543,907	405,651	474,155	56,644	1,389,345	1,832,040	89.5	287,182	39,149		
Chicago, St. Paul, Minn. & Omaha	March 1,617	6,528,797	552,515	7,081,312	1,021,347	1,460,688	173,744	4,140,122	7,157,668	93.8	473,477	382,368		
Clinchfield	March 317	1,323,592	3,910	1,327,502	163,636	304,162	35,284	390,749	962,034	71.6	380,749	258,153		
Colorado & Southern	March 745	4,050,478	12,845	4,063,323	516,954	878,041	101,749	1,237,958	465,665	68.9	1,237,958	939,793		
Colorado & Southern	March 745	1,071,318	61,658	1,132,976	121,563	223,971	27,063	1,483,074	2,907,069	74.4	312,120	112,816		
Colorado & Southern	March 745	2,658,456	211,925	2,870,381	367,100	621,325	76,982	1,401,230	2,620,926	84.2	492,037	229,862		
Colorado & Southern	March 902	103,797	1,188,135	1,291,932	179,250	179,250	44,507	223,578	74,400	83.2	223,578	98,488		
Ft. Worth & Denver City	March 902	2,656,848	35											

112,816
 152,277
 110,578
 259,026
 74,400
 98,488
 224,919
 270,684
 103,295
 239,862
 45,172
 187,487
 325,952
 74.4
 84.2
 83.9
 907,069
 2,020,002
 1,401,230
 465,271
 1,334,701
 76,982
 44,507
 128,804
 621,325
 179,250
 540,762
 367,100
 206,219
 533,494
 3,113,939
 188,155
 3,206,241
 355,067
 105,797
 985,328
 2,656,848
 902
 902
 March
 3 mos.
 Ft. Worth & Denver City



do you know the coffee cup test of Smooth Train Operation?

It's not listed in any engineering text . . . but a full coffee cup sitting in a clean, slopless saucer on a dining car table tells a lot about the smoothness of the ride . . . and the comfort of the passengers. And in this highly competitive day, these things are highly important.

With all the care and skill in the world, it is difficult to handle a modern heavy, high-speed passenger train without some jerking and jolting . . . unless the brake equipment is designed specifically to do the job. Westinghouse HSC Electro-pneumatic brake equipment gives the precise, velvet-smooth control that is needed. Braking impulse is transmitted to every car in the train simultaneously. The Speed Governor Control automatically proportions the brake pressure to the speed. The "AP" Decelostat immediately softens brake pressures if wheel slip impends.



Westinghouse Air Brake Co. WILMERDING, PA.



REVENUES AND EXPENSES OF RAILWAYS

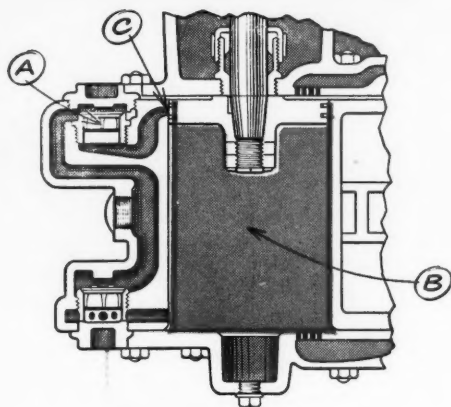
MONTH OF MARCH AND THREE MONTHS OF CALENDAR YEAR 1949

Name of road	Av. mileage operated during period	Operating revenues				Operating Expenses				Operating ratio	Net from railway operation		Net railway operating income	
		Freight	Passenger	Total (inc. misc.)	Maintenance of way and structures	Equipment	Traffic	Trans- portation	Total		Net from railway operation	Railway tax accruals	1949	1948
Colorado & Wyoming.....	March 41	151,029	.....	242,784	9,614	26,064	901	97,811	143,119	58.9	99,665	49,217	51,941	58,351
Columbus & Greenville.....	March 41	427,450	.....	703,883	35,290	73,165	2,520	275,955	411,289	58.4	292,594	147,864	146,544	159,042
Columbus & Greenville.....	March 168	170,689	Dr. 8	177,153	38,249	25,679	4,681	46,755	73,183	74.4	45,320	26,536	21,269	26,771
Delaware & Hudson.....	March 168	479,069	.....	80,820	13,532	80,820	13,532	134,982	386,428	79.0	102,819	59,029	52,404	56,865
Delaware & Hudson.....	March 794	3,915,123	157,680	4,181,073	510,220	917,774	66,865	1,740,279	3,951,143	81.4	2,003,452	1,096,785	346,838	573,917
Delaware & Hudson.....	March 794	11,829,542	551,862	12,696,882	1,644,785	2,914,756	209,038	5,368,577	10,693,430	84.2	2,003,452	1,096,785	860,769	1,432,708
Delaware, Lackawanna & Western.....	March 969	5,581,242	784,218	6,858,855	915,719	1,330,612	152,549	3,205,167	5,841,201	85.2	1,017,654	585,274	421,714	658,288
Denver & Rio Grande Western.....	March 2,443	16,101,125	2,470,445	20,103,343	2,513,660	3,780,944	456,646	9,387,128	16,843,332	83.8	3,260,011	1,786,348	1,403,470	1,606,875
Detroit & Mackinac.....	March 2,443	5,653,114	194,690	6,042,791	674,493	1,149,100	101,082	2,058,487	4,324,027	71.6	1,718,764	752,147	919,227	705,181
Detroit & Mackinac.....	March 232	15,662,576	729,658	17,252,972	1,843,045	3,190,867	455,816	6,447,185	12,754,207	73.9	4,498,765	1,984,749	2,383,257	2,835,836
Detroit & Toledo Shore Line.....	March 232	397,208	2,477	431,895	94,500	74,353	5,504	103,083	300,940	69.7	130,955	53,990	24,411	44,294
Detroit & Toledo Shore Line.....	March 50	588,831	.....	591,591	43,232	49,494	14,585	165,403	287,822	48.7	303,769	96,650	111,829	93,412
Detroit, Toledo & Ironton.....	March 50	1,787,564	.....	1,796,314	116,914	136,838	39,890	518,233	849,119	47.3	947,195	305,482	364,988	323,098
Duluth, Missabe & Iron Range.....	March 464	4,569,509	1,702	4,697,803	475,871	679,298	27,001	358,798	863,265	58.8	606,011	244,892	309,506	295,276
Duluth, Missabe & Iron Range.....	March 575	806,025	1,521	910,483	587,314	523,149	7,954	1,083,366	2,425,121	51.6	2,272,682	897,260	1,207,605	965,331
Duluth, Missabe & Iron Range.....	March 575	1,425,274	5,214	1,425,490	1,851,230	1,464,023	23,798	1,557,928	5,083,608	356.6	-3,658,118	257,964	-3,978,639	-3,677,529
Duluth, Winnipeg & Pacific.....	March 175	314,000	1,100	317,300	66,676	55,461	4,176	150,247	282,619	89.1	34,661	25,448	-34,023	78,798
Elgin, Joliet & Eastern.....	March 238	898,000	3,400	912,000	171,238	149,503	12,589	438,561	789,334	86.6	122,157	73,731	-54,887	145,830
Elgin, Joliet & Eastern.....	March 326	3,472,025	.....	4,217,887	267,670	574,326	28,779	1,415,054	2,392,318	56.7	1,825,569	693,282	774,295	506,313
Erie.....	March 2,229	10,226,802	.....	12,182,735	706,608	1,768,816	84,268	4,200,059	7,089,094	58.2	5,093,641	1,908,666	2,164,712	1,353,007
Erie.....	March 2,229	11,492,858	586,204	12,854,983	1,492,086	2,467,576	327,643	5,376,523	10,296,481	80.1	2,558,502	1,224,381	1,080,043	1,762,888
Erie.....	March 2,229	33,752,067	1,794,738	37,790,361	4,191,287	7,103,648	673,358	16,202,241	30,329,295	80.3	7,461,066	3,483,814	3,061,469	4,011,538
Florida East Coast.....	March 575	2,294,218	826,268	3,411,000	372,782	445,669	67,489	1,171,395	2,262,517	66.3	1,148,483	478,405	535,000	567,896
Georgia Railroad.....	March 326	7,732,144	2,718,828	9,251,371	1,110,557	1,292,012	198,776	3,273,725	6,503,208	70.3	2,748,163	897,534	1,466,751	1,529,560
Georgia & Florida.....	March 326	666,131	32,500	745,043	103,063	303,916	38,596	1,016,317	609,030	81.7	136,013	33,458	124,576	139,379
Georgia & Florida.....	March 408	1,864,493	102,107	2,091,425	305,405	303,916	89,596	1,016,317	1,807,300	86.4	284,125	104,400	232,376	222,883
Grand Trunk Western.....	March 971	3,467,000	167,000	3,923,000	596,890	649,697	63,689	1,800,223	3,271,764	83.4	651,236	245,356	394,294	234,418
Grand Trunk Western.....	March 971	10,115,000	526,000	11,453,000	1,721,660	2,131,094	187,443	5,360,139	9,861,021	86.1	1,591,979	727,962	654,345	198,163
Canadian Natl. Lines in New Engl.....	March 172	160,000	5,500	189,000	67,336	132,728	2,948	132,552	269,492	142.6	-80,492	22,576	138,384	-91,682
Great Northern.....	March 172	479,000	20,000	547,000	165,182	181,277	8,629	378,719	677,242	140.3	-220,242	67,728	-384,992	-316,853
Great Northern.....	March 8,318	14,307,876	761,438	16,173,192	2,716,927	3,333,700	388,379	6,372,932	13,435,859	83.1	2,737,333	1,419,540	996,681	214,954
Green Bay & Western.....	March 224	35,850,916	2,446,567	41,471,049	8,212,903	9,379,162	1,028,322	19,256,094	39,701,542	95.7	1,769,507	3,955,934	-3,188,884	406,867
Gulf, Mobile & Ohio.....	March 224	286,730	5	295,607	63,895	38,184	18,438	94,549	228,852	77.4	66,755	30,145	21,639	40,221
Gulf, Mobile & Ohio.....	March 2,901	834,333	46	863,549	170,891	105,476	55,330	291,983	662,883	77.8	200,666	97,916	57,673	101,797
Illinois Central.....	March 2,901	5,443,722	392,804	6,266,620	1,070,414	1,131,119	237,977	2,119,725	4,892,020	77.9	1,384,600	587,454	570,200	559,036
Illinois Central.....	March 2,901	15,949,593	1,358,682	18,599,974	3,188,029	3,268,859	705,813	6,257,232	14,360,521	77.2	4,239,453	1,724,524	1,673,431	1,565,007
Illinois Central.....	March 6,552	17,977,725	1,895,881	21,973,163	3,398,600	3,727,619	434,604	8,131,400	16,657,183	75.8	5,315,980	2,688,040	2,394,431	1,859,382
Illinois Terminal.....	March 474	51,261,609	63,422,460	111,113,365	9,714,004	11,113,365	1,338,893	24,190,360	49,183,081	77.5	14,239,379	7,366,794	6,182,055	5,447,762
Kansas City Southern.....	March 474	795,911	111,821	992,512	168,276	118,728	40,491	398,549	773,032	77.89	219,480	113,514	107,278	166,603
Kansas City Southern.....	March 474	3,448,592	334,313	3,946,330	446,435	399,493	112,254	1,190,747	2,283,275	77.50	663,055	324,537	324,058	409,170
Kansas, Oklahoma & Gulf.....	March 891	3,144,770	78,097	3,914,940	278,325	391,940	106,521	973,981	1,903,868	54.6	1,586,476	575,000	810,102	793,965
Kansas, Oklahoma & Gulf.....	March 328	489,447	706	10,104,312	861,768	1,152,328	291,145	2,838,469	5,541,441	54.8	4,562,871	1,625,000	2,401,823	2,234,213
Lake Superior & Ishpeming.....	March 328	1,459,862	2,295	1,473,869	151,485	122,883	53,283	394,374	779,434	52.9	694,435	299,467	94,600	67,239
Lake Superior & Ishpeming.....	March 156	110,946	49	126,440	54,818	58,032	1,820	58,032	158,081	125.2	-31,841	25,080	-54,566	100,950
Lehigh & Hudson River.....	March 156	230,251	131	230,786	103,285	165,089	5,279	142,169	444,125	190.3	-21,066	71,209	-268,613	-290,840
Lehigh & New England.....	March 96	696,578	.....	700,669	28,371	39,210	8,779	94,302	179,724	77.9	51,062	22,474	9,583	40,430
Lehigh & New England.....	March 191	423,901	.....	423,901	87,382	116,827	27,451	283,472	543,927	77.6	156,742	66,762	31,622	62,177
Lehigh Valley.....	March 191	1,402,429	.....	1,420,261	290,532	332,408	10,938	158,786	442,306	103.0	-12,713	23,849	5,687	113,943
Louisiana & Arkansas.....	March 1,252	5,198,664	303,235	5,773,384	740,257	1,050,229	136,454	2,553,122	4,785,601	82.0	1,037,783	359,678	550,651	596,221
Louisiana & Arkansas.....	March 1,252	15,463,055	1,013,912	17,332,867	2,263,125	2,924,889	423,552	7,959,369	14,332,319	82.7	3,000,830	1,200,848	1,310,808	771,895
Louisville & Nashville.....	March 756	4,203,051	181,582	4,562,963	596,318	537,269	155,308	1,499,716	2,922,614	64.5	1,619,716	626,456	770,825	248,932
Louisville & Nashville.....	March 4,775	13,379,160	1,118,811	15,507,347	2,417,443	3,362,905	6,400,625	13,096,505	29,618,256	83.9	7,560,057	4,975,768	3,330,028	4,119,845
Louisville & Nashville.....	March 4,771	40,611,138	3,583,569	47,079,313	6,836,424	10,231,763	907,902	19,719,640	39,518,256	83.9	7,560,057	4,975,768	3,330,028	4,119,845

STANDARD ENGINEER'S CASE FILE



Case 1156—Eliminating Carbon Trouble in Locomotive Air Pumps



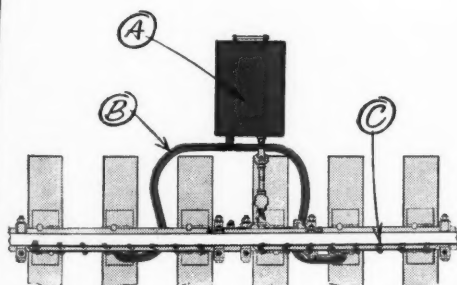
LOCOMOTIVE AIR PUMP
HIGH-PRESSURE CYLINDER AND DISCHARGE

After a full year of operation on an engine in main line service, the air discharge valves in the air pump, lubricated with Calol Air Pump Lubricant, were free of carbonaceous deposits ... pistons, rings and lands were also clean. Recommended for both the air and steam ends of Westinghouse and New York locomotive air compressors.

- A. Contains special additive—resists oxidation and the formation of lacquer and carbon throughout the pump and especially in critical valves.
- B. Prevents development of high temperatures ... sticks on cylinder walls, pistons and other parts—minimizes oil carry over into air passages and valves.
- C. Detergent keeps rings clean and free, air passages open.

Calol Air Pump Lubricant is made of selected stocks with very low carbon-forming tendencies.

Case 1141—Reducing Wear on Rails at Curves



AUTOMATIC RAIL AND FLANGE LUBRICATOR

Car and engine wheels carried Calol Rail and Flange Lubricant and lubricated rails for a distance of more than two miles from an automatic lubricator. Calol Rail and Flange Lubricant is made from a highly water-resistant base and special lubricating graphite.

- A. Very stable in use and storage — will not separate in any climate along U.S. railroads ... will not wash off rails or flanges.
- B. Pumps freely from lubricator — suitable for use in temperatures from below zero F. to over 160 degrees above.
- C. Forms and retains "button" formation on wiping bar.

Calol Rail and Flange Lubricant has a "short" non-stringy texture. This keeps it on flanges and the sides of rails and minimizes the usual tendency of grease to pull over the tops of rails.

For additional information and the name of your nearest Distributor, write
**STANDARD OIL COMPANY
OF CALIFORNIA**

225 Bush Street, San Francisco 20, California

The California Oil Company
Barber, N. J. — Chicago, Ill.

The California Company
17th and Stout Streets, Denver 1, Colo.

Standard Oil Company of Texas
El Paso, Texas



Trademark Reg.
U.S. Pat. Office

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF MARCH AND THREE MONTHS OF CALENDAR YEAR 1949

Name of road	Av. mileage operated during period	Operating revenues				Operating Expenses			Operating ratio	Net from railway operation	Net railway operating income	
		Freight	Passenger	Total (inc. misc.)	Maintenance of way and structures	Equipment	Traffic	Trans- portation			Railway tax accruals	1949
Maine Central.....	March 981	2,352,443	124,635	2,477,078	322,085	450,308	17,231	850,357	65.6	1,704,642	435,060	386,914
March 3 mos.		6,330,289	402,641	6,732,930	975,565	1,299,331	55,177	2,389,036	69.3	4,898,093	1,071,425	899,639
Midland Valley.....	March 334	6,154,352	157,596	6,311,948	38,506	25,482	3,340	56,215	83.1	26,690	19,772	570,139
March 3 mos.		18,460,362	470,320	18,930,682	100,491	53,197	10,956	162,865	74.1	121,895	67,124	27,144
Minneapolis & St. Louis.....	March 1,421	1,575,294	7,089	1,582,383	271,825	259,307	113,627	589,656	81.4	303,375	154,252	122,801
March 3 mos.		4,495,261	20,737	4,516,000	783,662	745,024	320,358	1,690,335	81.7	849,920	457,853	338,543
Minn., St. Paul & S. Ste. Marie.....	March 3,224	2,336,528	63,497	2,399,025	540,992	537,403	62,104	1,191,838	95.2	122,526	184,192	-83,166
March 3 mos.		6,094,434	228,764	6,323,198	1,637,497	1,620,174	186,686	3,331,329	108.1	-544,451	537,273	-1,289,597
Duluth, South Shore & Atlantic.....	March 530	3,954,407	10,689	3,965,096	101,650	102,970	18,373	220,224	105.5	-23,806	23,060	-71,052
March 3 mos.		11,944,789	28,083	11,972,872	294,928	299,033	56,956	651,085	104.2	-53,515	68,495	-174,489
Spokane International.....	March 152	1,175,686	1,544	1,177,230	188,735	188,833	4,376	68,561	76.5	10,476	23,521	33,126
March 3 mos.		3,815,068	4,318	3,819,386	423,024	423,904	12,225	199,620	101.7	-7,303	32,958	-73,746
Mississippi Central.....	March 148	205,169	27	205,196	51,446	23,142	12,552	52,540	70.4	62,174	24,673	22,797
March 3 mos.		591,414	6	591,420	141,602	67,880	38,270	159,312	71.6	171,720	72,521	51,534
Missouri-Illinois.....	March 172	363,264	161	363,425	70,904	47,727	7,494	98,666	62.7	136,408	51,152	79,861
March 3 mos.		1,065,297	593	1,065,890	1,071,741	1,401,233	22,026	287,619	59.8	430,917	182,625	235,427
Missouri-Kansas-Texas Lines.....	March 3,253	5,853,666	361,059	6,214,725	1,043,385	889,372	210,337	2,479,894	73.4	1,779,431	699,497	621,810
March 3 mos.		16,799,816	1,110,470	17,910,286	2,838,657	2,685,393	677,534	7,813,503	77.4	4,340,859	1,653,559	1,351,270
Missouri Pacific.....	March 7,007	15,415,933	919,248	16,335,181	2,736,608	2,977,210	414,442	6,798,985	76.3	4,216,077	1,535,827	2,149,368
March 3 mos.		43,040,048	3,022,801	46,062,849	7,246,926	8,782,599	1,253,588	20,719,115	78.6	10,898,970	3,752,136	5,374,694
Gulf Coast Lines.....	March 1,717	3,044,106	82,479	3,126,585	602,329	463,530	81,557	1,103,310	72.4	905,224	267,044	454,550
March 3 mos.		9,818,739	253,918	10,072,657	1,863,077	1,299,389	242,267	3,594,100	69.5	3,238,474	919,764	1,571,005
International-Great Northern.....	March 1,110	2,207,662	150,651	2,358,313	448,084	439,804	52,654	1,131,966	83.3	440,145	115,228	175,797
March 3 mos.		6,487,167	495,720	6,982,887	1,376,163	1,255,245	159,086	3,418,227	84.1	1,233,996	343,606	454,836
Monongahela.....	March 170	400,698	1,050	401,748	79,632	64,696	920	171,911	79.0	85,516	90,138	-93,762
March 3 mos.		1,742,785	3,136	1,745,921	292,081	202,814	2,806	433,499	61.6	674,804	275,105	46,901
Montour.....	March 51	171,332	.....	171,332	14,502	66,215	829	61,366	88.6	19,588	38,496	40,022
March 3 mos.		636,741	.....	636,741	53,049	221,299	2,555	228,195	83.7	104,865	140,052	156,559
Nashville, Chatt. & St. Louis.....	March 1,051	2,438,829	180,491	2,619,320	467,977	326,765	118,611	1,186,611	76.7	667,966	337,171	294,712
March 3 mos.		6,773,031	536,667	7,309,698	1,275,710	994,934	318,082	3,455,389	78.7	1,732,305	907,300	794,769
New York Central.....	March 10,731	44,394,047	9,064,036	53,458,083	8,093,323	11,231,514	1,052,999	27,264,993	84.8	9,063,015	4,601,991	3,301,273
March 3 mos.		131,704,092	29,611,659	161,315,751	22,004,722	35,166,134	3,081,173	82,842,780	85.5	25,925,567	13,547,518	8,068,909
Pittsburgh & Lake Erie.....	March 221	3,369,697	82,957	3,452,654	418,946	930,982	65,452	1,310,729	79.9	732,478	544,339	726,885
March 3 mos.		10,221,543	257,684	10,479,227	1,237,908	2,868,782	197,441	3,981,083	80.8	2,108,493	1,692,110	2,231,527
New York, Chicago & St. Louis.....	March 1,686	8,392,817	132,952	8,525,769	1,134,178	1,400,169	225,624	3,205,662	72.1	2,429,685	952,955	1,117,041
March 3 mos.		24,822,271	379,174	25,201,445	3,346,049	4,058,770	651,412	9,252,583	70.6	7,584,889	2,963,102	3,572,059
New York, New Haven & Hartford.....	March 1,798	7,575,016	3,901,299	11,476,315	1,713,006	1,738,258	244,393	5,463,281	78.9	2,685,903	1,102,000	903,926
March 3 mos.		21,851,347	12,257,560	34,108,907	5,327,081	5,539,769	795,427	16,383,826	80.9	7,217,319	2,897,000	2,083,353
New York Connecting.....	March 21	229,570	.....	229,570	61,578	18,719	.....	30,034	46.1	132,013	59,819	81,296
March 3 mos.		682,343	.....	682,343	187,702	84,193	.....	175,147	63.3	262,858	190,477	133,802
New York, Ontario & Western.....	March 544	511,974	954	512,928	96,905	94,604	29,661	276,186	94.9	28,525	38,527	-113,539
March 3 mos.		1,497,615	7,214	1,504,829	261,329	284,403	92,423	857,838	99.6	6,734	113,009	-289,950
New York, Susquehanna & Western.....	March 120	356,214	44,232	400,446	48,437	54,061	6,078	188,592	80.3	80,926	31,515	22,221
March 3 mos.		1,012,632	130,398	1,143,030	142,568	161,217	18,734	544,112	80.9	225,016	91,727	44,916
Norfolk & Western.....	March 2,129	10,694,618	493,365	11,187,983	1,817,979	2,712,273	283,759	4,159,074	80.1	2,359,208	1,521,081	1,487,753
March 3 mos.		37,024,670	1,447,718	38,472,388	5,609,798	8,960,134	795,870	13,213,641	75.0	10,055,223	6,125,755	6,218,168
Norfolk Southern.....	March 683	731,045	184	731,229	143,026	88,524	13,073	245,064	77.1	173,431	92,415	60,830
March 3 mos.		2,116,163	379	2,116,542	413,053	262,134	39,073	737,511	78.4	472,592	254,946	157,571
Northern Pacific.....	March 6,889	11,090,595	471,128	11,561,723	2,547,636	2,573,880	265,234	4,882,978	87.4	1,567,676	1,136,643	744,506
March 3 mos.		27,862,120	1,651,308	29,513,428	6,867,442	7,788,190	766,414	14,337,391	97.6	766,795	3,388,513	-1,844,197
Northwestern Pacific.....	March 331	599,170	2,550	599,172	204,935	93,319	4,010	319,093	101.2	-7,712	35,557	-88,632
March 3 mos.		1,616,164	13,064	1,629,228	535,126	256,725	12,465	918,169	103.5	-60,396	108,239	-278,531
Oklahoma City-Ada-Atoka.....	March 132	94,808	Dr.	94,808	20,330	4,735	1,359	22,413	55.5	42,472	17,443	14,203
March 3 mos.		252,135	Dr.	252,135	52,818	14,253	4,571	64,754	58.1	106,402	42,824	29,681
Pennsylvania.....	March 10,142	55,801,030	12,191,171	67,992,201	8,837,816	15,411,014	1,316,565	34,013,067	84.0	11,896,167	6,504,866	3,928,510
March 3 mos.		168,920,745	39,871,111	208,791,856	26,652,706	49,700,350	3,781,311	105,072,671	85.3	33,422,861	19,506,691	9,020,948
Long Island.....	March 376	1,058,311	2,471,183	3,529,494	498,942	700,752	22,067	2,399,160	103.1	-116,845	453,070	-811,349
March 3 mos.		3,187,459	7,182,285	10,370,744	1,828,475	2,500,628	150,251	6,912,767	110.3	-1,129,009	1,389,435	-3,332,860

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ARC WELDING SIMPLIFIES DESIGN... SPEEDS OUTPUT OF HOPPER CARS

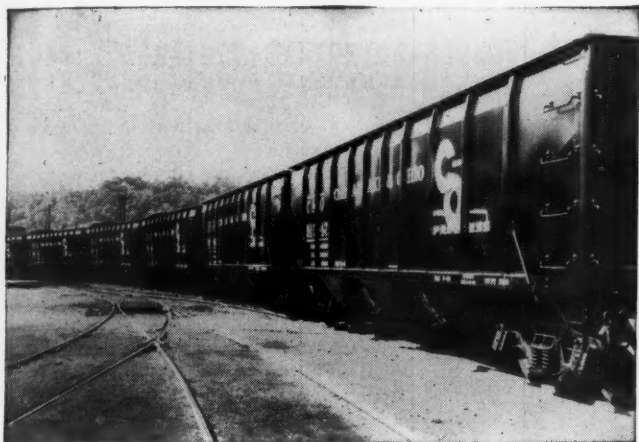


Fig. 1. Part of 25 arc welded steel hopper cars turned out daily by the American Car and Foundry Co., Huntington, W. Va., for the Chesapeake & Ohio Railroad.

By A. T. COX

Vice President, Lincoln Electric Railway Sales Co.
Cleveland, Ohio

Straight-line production methods embodying the latest techniques in arc welding and work handling devices result in a daily output of 25 hopper cars at the American Car and Foundry Shops in Huntington, West Virginia, for the Chesapeake & Ohio Railroad. Through welded fabrication, the construction of 7,000 of these 70-ton hopper cars is being greatly simplified, and many costly operations formerly required are being eliminated. In addition, solid welded joints eliminate the corrosion points found in the open lapped joints and ledges that exist in riveted design.

The welding is done with the hidden arc process using

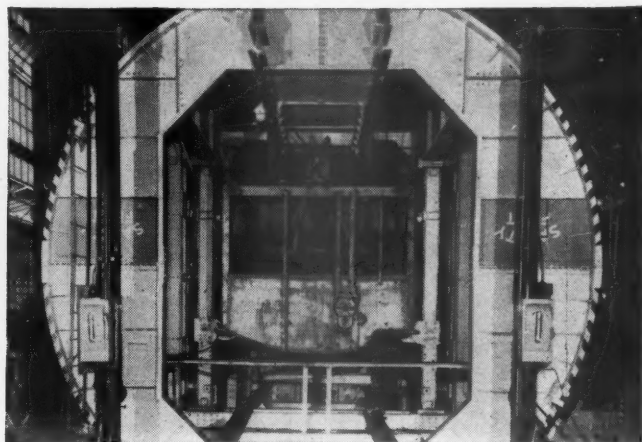


Fig. 2. Hopper car held inverted in "turn-over" type fixture to allow fast, low-cost arc welding with "Automatic Lincolnweld" process.

"Automatic Lincolnweld" units incorporated in fast, air-operated clamp-type fixtures. The high intensity welding currents used result in faster welding with deeper penetration and eliminate the need for joint preparation. The welding arc is completely hidden in granular flux. Arc rays are invisible; smoke and spatter normally encountered with hand welding are avoided. With welding current and travel rate preset, the operator needs only to start and stop the welding cycle.

Short irregular welds are made with the "Manual Lincolnweld." Similar to the "Automatic Lincolnweld," this process combines the benefits of hidden arc welding in granular flux with the versatility of hand welding with coated electrodes. With the "Manual Lincolnweld," (Fig. 5), the electrode feed is automatic and continuous. The granular flux is directed to the weld from a cone-shaped reservoir on the hand welding gun.

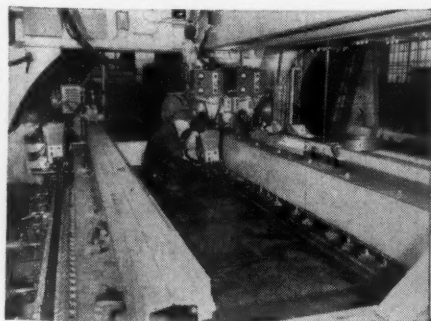


Fig. 3. Arc welding bulb angles and pressed channel side sills to top and bottom of welded side sheets using the "Automatic Lincolnweld" process.

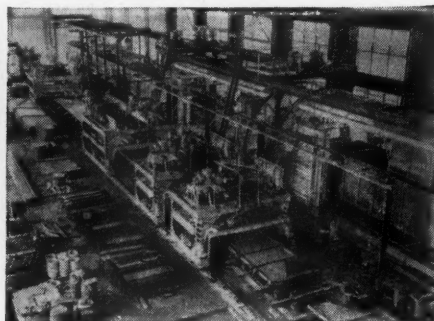


Fig. 4. General view of car shop showing continuous-line production setup for weld-fabricating hopper cars.



Fig. 5. Hand welding an insert piece to frame channels using submerged arc welding with "Manual Lincolnweld."

The above is published by **THE LINCOLN ELECTRIC COMPANY** in the interests of progress.
For further information about arc welding procedures or equipment, write The Lincoln Electric Railway Sales Co., 11 Public Square, Cleveland, Ohio,
railroad representatives of The Lincoln Electric Company, Cleveland, Ohio.

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF MARCH AND THREE MONTHS OF CALENDAR YEAR 1949

Name of road	Av. mileage operated during period	Operating revenues				Operating Expenses				Operating ratio	Net from railway operation	Net railway operating income	
		Freight	Passenger	Total	Way and structures	Maintenance of equipment	Traffic	Trans- portation	Total			Railway tax accruals	1948
Pennsylvania-Reading Seashore Lines	March	472,618	158,638	631,256	216,159	184,482	10,293	581,717	1,023,645	155.6	365,733	88,793	-365,733
Pennsylvania-Reading Seashore Lines	3 mos.	1,407,109	492,473	1,899,582	597,931	579,636	29,781	1,626,082	2,999,776	152.0	1,026,082	270,119	-1,026,082
Pittsburgh & Shawmut	March	149,700	150,903	299,603	70,308	118,165	13,319	153,991	299,603	80.7	109,919	6,252	29,304
Pittsburgh & Shawmut	3 mos.	492,414	452,709	945,123	216,912	356,326	36,157	117,621	945,123	77.7	336,991	17,379	106,048
Pittsburgh & West Virginia	March	665,869	101,075	766,944	360,060	395,368	123,198	516,256	1,331,799	66.5	230,995	302,811	162,044
Pittsburgh & West Virginia	3 mos.	2,101,507	2,171,520	4,273,027	1,095,149	1,199,868	380,598	1,680,547	3,875,017	70.7	766,944	935,851	435,052
Reading	March	8,116,650	606,416	8,723,066	1,500,149	1,799,868	130,598	4,012,102	7,782,102	83.7	1,517,657	771,621	671,283
Reading	3 mos.	23,640,350	1,816,252	25,456,602	4,674,381	5,623,350	383,463	12,337,822	24,012,102	83.7	4,012,102	2,486,224	1,525,878
Richmond, Fredericksburg & Potomac	March	1,360,542	377,949	1,738,491	416,963	665,738	21,520	744,717	1,162,681	78.9	476,379	245,436	230,943
Richmond, Fredericksburg & Potomac	3 mos.	3,870,781	1,036,219	4,906,999	1,095,813	1,611,159	63,570	2,013,553	3,707,312	83.5	1,061,115	530,137	530,975
Rutland	March	353,957	27,117	381,074	89,361	101,075	11,163	99,540	190,610	109.5	101,075	31,712	69,358
Rutland	3 mos.	1,017,190	96,724	1,113,914	288,107	321,717	41,310	329,909	610,826	112.6	321,717	93,265	217,461
Sacramento Northern	March	160,474	166,477	326,951	19,710	67,696	1,132	87,406	107,116	110.5	17,538	12,726	-45,891
Sacramento Northern	3 mos.	424,366	439,121	863,487	50,000	172,823	2,992	205,666	222,823	131.5	50,000	38,970	-12,030
St. Louis-San Francisco	March	5,899,577	506,187	6,405,764	1,468,665	1,297,506	240,850	3,707,021	5,004,527	83.2	1,392,537	826,096	566,441
St. Louis-San Francisco	3 mos.	17,299,145	1,518,561	18,817,706	4,408,087	3,894,308	723,300	10,939,331	14,333,688	83.2	3,584,115	2,456,443	1,127,672
St. Louis, San Francisco & Texas	March	335,323	369,421	704,744	147,053	95,052	6,296	242,301	242,301	71.2	106,271	26,416	43,859
St. Louis, San Francisco & Texas	3 mos.	973,296	1,102,131	2,075,427	417,053	287,104	18,892	639,457	704,744	71.2	267,462	79,357	90,833
St. Louis Southwestern Lines	March	5,507,753	49,399	5,557,152	577,194	697,092	142,623	1,298,363	3,323,932	57.8	2,427,119	962,279	1,247,802
St. Louis Southwestern Lines	3 mos.	16,509,093	147,194	16,656,287	1,734,587	2,094,284	430,364	3,792,021	5,226,871	57.8	3,420,485	2,777,609	2,722,876
Seaboard Air Line	March	1,678,568	12,528	1,691,096	2,113,781	2,113,781	330,276	4,631,051	6,744,832	73.6	2,658,181	1,190,629	3,107,493
Seaboard Air Line	3 mos.	5,141,468	37,584	5,179,052	6,347,662	6,347,662	990,480	13,468,632	20,816,294	73.6	8,016,562	3,572,174	4,444,418
Southern Railway	March	1,392,712	38,482	1,431,194	3,334,711	3,334,711	364,929	4,700,163	8,034,872	76.6	4,429,610	2,047,567	2,382,043
Southern Railway	3 mos.	4,178,461	115,446	4,293,907	10,005,388	10,005,388	1,095,423	13,460,817	23,466,205	76.6	13,360,785	6,097,132	7,263,653
Alabama Great Southern	March	1,202,580	87,408	1,290,000	208,618	267,993	29,615	473,331	1,056,576	75.4	345,519	201,421	175,621
Alabama Great Southern	3 mos.	3,435,619	263,081	3,698,700	590,142	731,975	80,536	1,307,951	3,117,051	75.4	1,307,951	527,027	430,924
Cinn., New Orleans & Texas Pacific	March	2,609,009	84,845	2,693,854	433,870	507,242	58,196	1,089,161	1,620,412	71.1	1,048,248	517,469	530,779
Cinn., New Orleans & Texas Pacific	3 mos.	7,827,911	254,535	8,082,446	1,292,274	1,511,983	174,894	2,895,310	4,304,268	71.1	2,895,310	1,360,201	1,534,067
Georgia Southern & Florida	March	1,446,142	260,404	1,706,546	128,131	158,872	22,166	659,367	1,323,663	69.8	372,662	166,132	116,531
Georgia Southern & Florida	3 mos.	4,346,142	780,404	5,126,546	386,385	476,872	62,166	1,818,817	3,623,663	69.8	1,048,248	483,201	565,047
New Orleans & Northeastern	March	751,104	175,526	926,630	117,570	80,860	18,399	203,907	161,800	53.2	405,519	174,191	231,318
New Orleans & Northeastern	3 mos.	2,253,310	526,578	2,779,888	353,860	269,211	53,846	615,257	1,317,927	53.2	1,048,248	483,201	565,047
Southern Pacific	March	3,242,911	35,397	3,278,308	4,568,396	4,568,396	7,114,884	14,294,835	21,863,231	80.9	6,765,314	2,362,055	4,403,259
Southern Pacific	3 mos.	9,728,971	106,190	9,835,161	13,371,178	13,371,178	21,144,884	41,921,615	65,296,415	80.9	19,890,983	7,082,133	12,808,850
Texas & New Orleans	March	8,841,364	717,875	9,559,239	1,440,412	1,440,412	220,472	3,867,836	7,302,648	73.5	2,708,396	1,375,515	1,332,881
Texas & New Orleans	3 mos.	25,551,560	2,226,736	27,778,296	4,384,099	4,384,099	648,737	11,734,902	22,779,899	73.5	6,350,047	2,945,705	3,404,394
Spokane, Portland & Seattle	March	1,891,136	81,167	1,972,303	396,111	264,245	22,738	699,267	1,470,737	70.0	630,464	146,292	484,172
Spokane, Portland & Seattle	3 mos.	5,673,150	243,501	5,916,651	1,194,331	1,194,331	67,484	2,258,115	4,273,228	77.4	1,213,509	482,050	731,459
Tennessee Central	March	1,052,225	6,726	1,058,951	1,174,215	1,174,215	29,696	514,604	942,790	80.3	231,435	50,166	181,269
Tennessee Central	3 mos.	3,156,676	20,228	3,176,904	3,528,851	3,528,851	89,088	1,549,310	3,078,161	80.3	231,435	50,166	181,269
Texas & Northern	March	1,067,706	1,669	1,069,375	1,669	1,669	160	41,732	57,572	46.9	65,279	22,209	43,069
Texas & Northern	3 mos.	2,760,605	4,993	2,765,598	4,993	4,993	493	96,106	151,770	47.2	169,733	57,435	112,298
Texas & Pacific	March	4,687,838	371,587	5,059,425	758,043	880,182	164,155	2,233,351	4,237,838	79.2	1,136,451	370,209	530,617
Texas & Pacific	3 mos.	13,767,990	1,090,917	14,858,907	2,233,351	2,577,275	501,126	6,756,721	12,923,913	79.2	3,357,905	1,039,609	1,635,015
Texas-Mexican	March	293,180	269,909	563,089	80,359	96,798	5,340	70,551	170,929	63.3	98,980	33,809	45,179
Texas-Mexican	3 mos.	726,162	803,359	1,529,521	240,815	287,596	15,340	226,011	514,778	64.1	288,581	102,960	185,621
Toledo, Peoria & Western	March	347,135	12,011	359,146	1,163,303	1,163,303	95,137	302,890	258,239	64.1	143,054	57,618	85,436
Toledo, Peoria & Western	3 mos.	1,041,335	36,033	1,077,368	3,496,916	3,496,916	285,337	908,390	2,588,526	62.4	437,880	170,745	267,135
Union Pacific	March	29,600,553	2,231,613	31,832,166	4,129,651	5,446,564	862,577	12,145,574	24,296,558	72.6	9,148,600	2,632,201	5,413,582
Union Pacific	3 mos.	70,476,143	6,390,391	76,866,534	12,384,722	16,133,947	2,356,364	37,476,055	78,331,466	72.6	24,296,558	7,044,334	17,247,224
Utah	March	200,773	200,773	401,546	56,491	56,491	664	79,418	171,838	85.2	29,846	13,437	16,409
Utah	3 mos.	579,856	579,856	1,159,712	159,631	159,631	2,227	273,440	551,375	96.0	22,862	40,872	-17,910
Virginian	March	2,092,549	3,982	2,096,531	343,430	633,593	39,087	626,224	1,715,392	73.6	467,476	259,500	207,976
Virginian	3 mos.	6,276,010	12,011	6,288,021	1,079,091	2,276,654	113,553	2,170,577	5,883,575	66.2	3,008,286	1,400,500	1,953,038
Wabash	March	5,414,707	270,753	5,685,460	1,134,268	1,134,268	247,968	2,877,336	5,707,959	92.6	459,375	221,550	237,829
Wabash	3 mos.	16,235,216	810,835	17,046,051	3,458,722	3,458,722	765,593	8,544,738	18,149,738	92.6	3,729,260	1,652,986	1,076,274
Ann Arbor	March	503,516	84,046	587,562	26,847	26,847	22,630	261,767	490,798	97.4	13,196	17,702	-4,506
Ann Arbor	3 mos.	1,509,548	254,938	1,764,486	80,046	80,046	69,312	880,875	1,580,902	95.1	40,301	54,031	-13,730
Western Maryland	March	3,183,586	9,629	3,193,215	503,340	689,548	69,239	1,079,564	2,481,058	67.9	1,711,947	548,000	668,558
Western Maryland	3 mos.	10,879,445	29,421	11,378,866	1,434,759	2,179,537	212,178	3,421,250	7,662,870	67.4	3,711,777	1,755,000	1,863,280
Western Pacific	March	3,964,374	158,002	4,122,376	487,982	539,370	157,795	1,248,437	2,646,437	75.7	1,008,806	536,678	472,119
Western Pacific	3 mos.	11,953,115	474,006	12,427,121	1,462,964	1,618,740	466,465	3,786,002	8,102,719	75.7	2,844,568	1,327,821	1,516,747
Wheeling & Lake Erie	March	2,631,955	11	2,631,966	365,487	480,695	66,465	815,210	1,802,230	66.5	910,766	498,988	411,778
Wheeling & Lake Erie	3 mos.	7,901,418	33	7,901,451	1,081,796	1,356,288	199,620	2,514,021	5,330,230	66.5	2,844,568	1,327,821	1,516,747
Wisconsin Central	March	2,194,165	37,416	2,231,581	290,849	358,591	59,490	1,006,841	1,802,766	77.0	539,640	139,870	399,776
Wisconsin Central	3 mos.	6,080,771	109,237	6,190,008	811,112	1,077,981	178,772	2,964,149	5,387,118	81.3	1,218,563	410,130	462,793

GENERAL NEWS

(Continued from page 66)

M. & St. L. Brings Railroad To Stockholders

Recognizing that distance, time or other factors often make it impossible for railroad stockholders to visit or personally inspect the property or operations of the company whose securities they own, the Minneapolis & St. Louis has done the next best thing, by bringing the railroad to its shareholders through the medium of motion pictures.

The road's annual stockholders' meeting at New York on May 10 was featured by the showing of "Fast Freight," a 16-mm. black and white sound movie, running approximately 22 min. The film, which will also be shown to traffic clubs and any other legitimately interested organizations, tells the story of a trip on one of the road's Diesel-powered freight trains from Minneapolis, Minn., to Peoria, Ill. Sequences covering track and equipment maintenance, yard operation, passenger service, and the various cities and industries served by the M. & St. L. are also included.

Canadian Roads Increase First-Class Fares 15 Per Cent

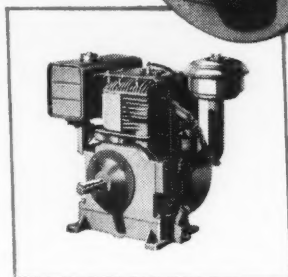
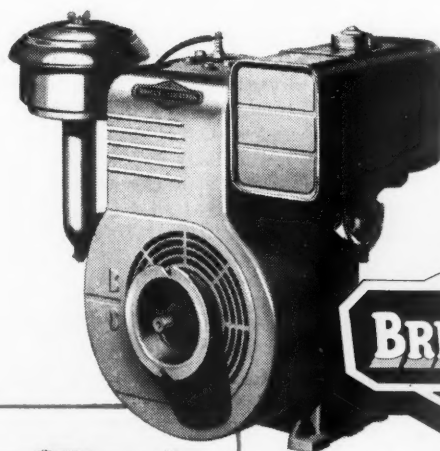
Increases ranging up to 15 per cent in first-class passenger fares on Canadian railroads became effective on May 10, with the approval of the Board of Transport Commissioners. Like the increase in coach fares which, as reported in the *Railway Age* of April 16, became effective on April 9, the present first-class increase is equal to the former 15 per cent passenger transportation tax, which was abolished by the Canadian government on March 23.

The higher first-class fares apply only between points in Canada, and will not affect the practice recently followed by many residents of United States border cities, of crossing into Canada to buy railroad tickets between points in this country as a means of avoiding the 15 per cent tax still in effect here.

Safety Men Meet at Chicago

Declaring that "no railway safety record will be better than the management of that railway demands," S. F. Lynch, general manager of the Illinois Central at Chicago, told a gathering of railroad safety officers in that city on May 4 that the over-all improvement in safety performance on the I. C. during the past few years is largely due to a "top-down" interest. Accidents, he said, constitute a challenge to railway management for two reasons: (1) They are inhumane, producing distress and suffering and, in many instances, complete desolation; and

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(2) they inflict an economic loss upon the railroad that produces a serious and unwarranted drain upon the company's treasury.

Appearing with Mr. Lynch on the one-day program of the Midwest Regional Safety Section, Association of American Railroads, in connection with the twenty-sixth annual Midwest Safety Show, May 2-5, inclusive, was George A. Kelly, vice-president of the Pullman Company. Mr. Kelly spoke on the "Safety of Freedom," citing the dangers of, and methods for combating, "creeping Socialism which whittles away individual liberty and constantly increases the cost of freedom." Other talks were given by George R. Huntoon, superintendent of safety, Chicago, Rock Island & Pacific, whose subject was "Psychological Aspects of Railroad Safety," and J. F. Kohout, agent at the Chicago & North Western's Proviso (Ill.) station, who discussed "Safety in the Largest Freight Transfer Station."

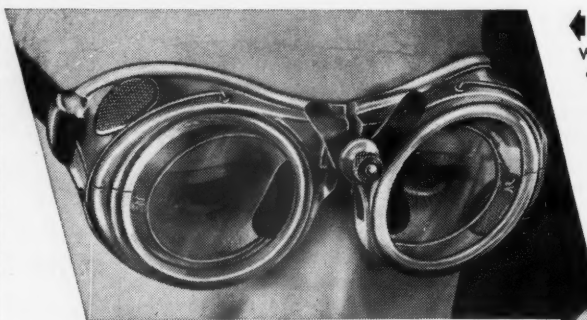
Mr. Lynch, in his address, sketched the enviable safety record of the I.C., which reduced its casualty ratio from 14.16 in 1929 to 2.84 in 1948. He credited the following items, among others, with helping to achieve a safer railroad: (1) A "good housekeeping" program; (2) a labor-management suggestion system, which brought about the adoption in 1948 of 1,896 safety suggestions; (3) a plan whereby safety cards are presented to employees in supervisory capacities who are not charged

during the previous year with a reportable injury to themselves or to the men they supervised; and (4) visual education in the form of posters, cartoons, movies, slide films and book matches bearing safety slogans.

A.A.R. Protective Section Holds Twenty-Ninth Meeting

Approximately 125 representatives of nearly 50 railroads attended the twenty-ninth annual meeting of the Protective Section of the Association of American Railroads at Edgewater Park, Miss., May 2-4, to listen to addresses and committee reports on, and participate in discussions of, accident and freight claim prevention, railway police training, and other matters of concern to the members.

I. B. Tigrett, president of the Gulf, Mobile & Ohio, was the principal speaker at the section's May 2 dinner meeting, while railroad speakers at the business sessions included D. S. Thomson, vice-president, Eastern region, Canadian Pacific; S. F. Lynch, general manager, Illinois Central; A. L. Green, special representative, Freight Claim Division, A.A.R.; W. H. Bailey, superintendent of safety, Missouri Pacific; J. B. Respass, inspector, Bureau of Explosives, A.A.R., and E. Mason Brown, chief special agent, G.M.&O. Non-railroad speakers were John Kuykendall, assistant attorney general of Mississippi; Sam Lumpkin, lieu-



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tenant governor of Mississippi; Col. Francis E. Howard, deputy provost marshal, United States Army; J. J. Doran, chief inspector, Post Office Department, and Percy Wyly II, special agent, Federal Bureau of Investigation.

The business sessions were also marked by committee reports on law enforcement, presented by committee chairman J. D. Roosa, superintendent of property protection, New York Central; on trespassing, by W. J. Melvin, chief special agent, Chesapeake & Ohio, assisted by R. V. O'Dea, lieutenant of police, Erie; on regional police committees, by W. G. Fetzner, chief special agent, Chicago, Burlington & Quincy; and on railway police training, by H. L. Denton, general superintendent police, Baltimore & Ohio, assisted by T. W. Hamilton, superintendent of police, Eastern region, Pennsylvania, D. L. Wood, chief special agent, I. C., and M. M. DesChamps, chief of property protection, Atlantic Coast Line.

Round table discussions on railroad police and grade crossing accidents were led by W. I. Spittler, chief special agent, Chicago, Indianapolis & Louisville, and E. S. Glass, chief special agent, Norfolk & Western; on Pullman linen losses by H. B. Reed, chief maintenance officer, Pullman Company; on malicious attempts at train wrecking by J. N. Godman, superintendent of police, Reading; and on freight claim prevention by F. G. Love, manager property protection and freight claim departments, N.Y.C., and L. A. Thomas, assistant vice-president, special service and freight claims, Southern System.

Entertainment features of the meeting included a sightseeing trip along the Gulf coast to Mobile, Ala., an informal dinner, and motion pictures furnished by the C.P.R. and the New York, New Haven & Hartford.

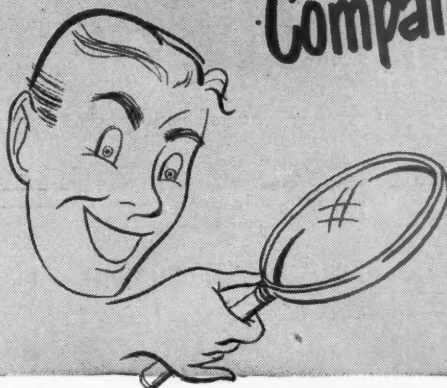
A. H. Cadieux, chief, department of investigation, C.P.R., and section chairman, presided at the business sessions and the dinner. On the report of the nominating committee, headed by George A. Shea, director of investigation, Canadian National, G. R. Crowley, superintendent of police, New Haven, and section vice-chairman, was elected chairman for the coming year, to succeed Mr. Cadieux. Mr. Crowley was succeeded as vice-chairman by W. G. Fetzner of the Burlington. J. C. Caviston was reelected secretary.

C. & O. Chesapeake District To Get Three Vista-Dome Cars

Three vista-dome cars which will be available to Pullman passengers on the Chesapeake & Ohio's Chesapeake district are expected to go into operation in June. They will serve travelers between Detroit, Mich., and Richmond, Va., including passengers to and from such points as White Sulphur Springs, W. Va., Williamsburg, Va., Hot Springs and Phoebus. Each of the new dome cars will have three drawing rooms, one bedroom and five roomettes.

May 14, 1949

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